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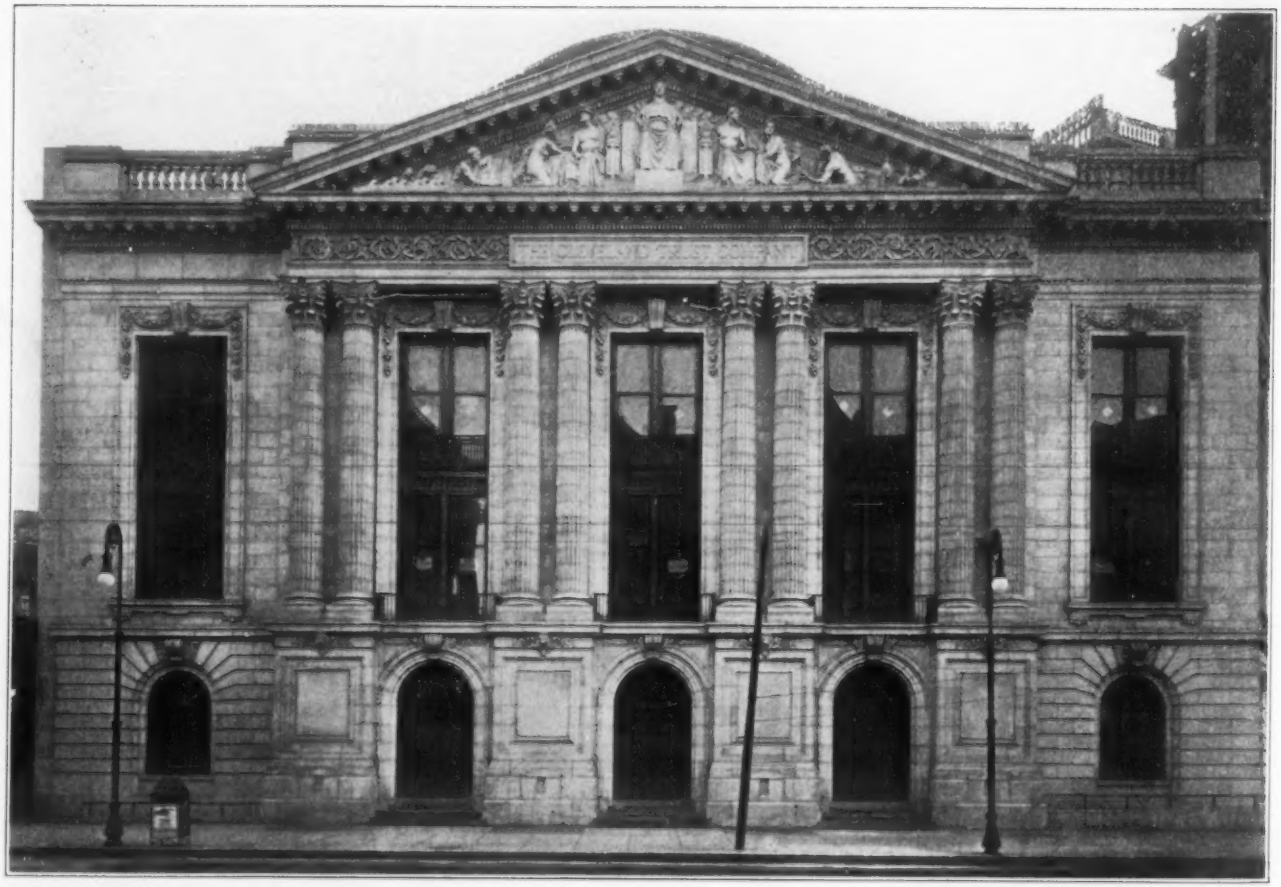

PRINCIPAL FAÇADE—CLEVELAND TRUST COMPANY.

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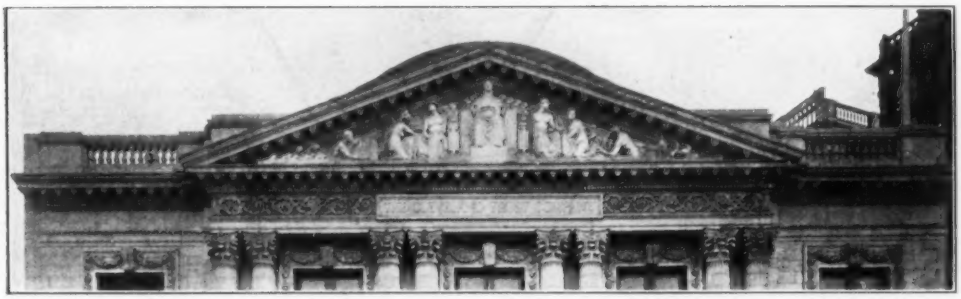

Recent Bank Buildings of the United States

Banking as an institution is as old as the hills, but there is, perhaps, no time-honored institution about the origin of which we know less. Of the use of money, the earliest record that we possess is the purchase, about B. C. 1859, of the field of Macpelah by Abraham, from Ephron, the Hittite for "400 shekels of silver 'current money' with the merchant." (Gen. xxiii., 16). The expression "current money" would imply that there was other money, the use of which was limited to certain localities and for certain purposes and which would be honored only when so used. Of brass money Homer mentions the existence in B. C. 1184, while Herodotos, the historian, says that the Lydians at Aegina in B. C. 183, were the first people who coined gold and silver money. The Parian chronicle, however, attributes the coinage of silver money, as well as of copper, to Pheidon of Argus in B. C. 895. The New Testament makes mention of the money changers who had tables in the Temple of Jerusalem, and as far as the writer has been able to discover, this completes about all that is known about banks and banking among the Israelites, Egyptians, Hittites, Babylonians, Persians and Assyrians.

When we pass on to Greek civilization, the records are more enlightening. We know from the remains of accounts which have recently come to light that some of the temples were in a sense banks, that is, places where money was safeguarded. The temple at Delphi is celebrated in literature as the great bank of Greece. It was here that wealthy individuals from the different Greek states and even the states themselves could safely store their hoards. The religion of the land was to the Greeks of those days what the guarantee of the government is to us today, and, perhaps, in a higher degree. In the event of war, the treasure was perfectly safe from the attack of either side. But these banks, of which there must have been a considerable number, paid no interest, and for those individuals who were content to take the risk of having their money in a less safe place, there were the merchants who carried on, in addition to their regular affairs, a flourishing banking business, especially in Athens.

Apart from the security of keeping money and treasure in the temple, the control of so many important functions of government rested with the keepers of the spiritual man, that it is not surprising to find the edifices of religion doing duty also as treasure-houses. The temples which were especially selected to perform this service were those of Ath-

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ena and Aphrodite Urania, in which a chamber will be found in an inner part of the temple under the name opisthodomos or treasure chamber. No doubt, some of the archaic Greek tombs which are called to the attention of students in architecture as the beginnings of classic art, were used to store treasure and money. One of these massive stone erections has come down to us as the Tholos or Treasure House of Atreus. Of course, we cannot tell but that Atreus was the Croesus of his time and built the underground domical room of massive stones simply to safeguard his own worldly possessions. But on the other hand, it may have been a depository for the funds of others, in short, a bank. Dr. Reber in his History of Ancient Art says of it: "The Tholos of the palace at Ithaca was an isolated circular structure before the court, and may, perhaps, be identified with the high thalamos to which Telemachos descended. In this also lay gold and metal in heaps, while shrines containing garments and amphoras (urns) filled with oil and wine, etc., stood around. Its double door of careful workmanship agrees with the character of a treasury. If this identification of the tholos and thalamos be accepted, no doubt can remain that we have here to deal with a space similar to many yet remaining in Greece generally known under the name of treasure-houses. Examples exist at Orchomenos, near Pharsalos, Amyclae, Meridi and in Mykenae. Of the five in Mykenae, that known as the Treasury or Tholos of Atreus, remains in an admirable state of preservation, especially as regards the interior."

Of the Roman system of banking and banks we have more positive knowledge. Roman literature records the fact that there were in the days of the Empire two kinds of bankers. The first were appointed by the government to receive the taxes and were, in consequence, officers of great public importance and held in high esteem, being considered eligible for the office of consul, the most exalted in the gift of the nation. These officials, however, did only business of a public nature, acting as depositories for money and valuables and paying no interest on the money. According to their specific duties, they bore the titles of Argentarii, Mensarii, Numularii and Collybistae, and their places of business were variously called Tabernae, Argentarae, Mensae and Numularae. Besides these, there was a large class of private or independent bankers who borrowed, lent and safeguarded money for their own gain, in very much the same way as it is done to-day. These latter belonged to a distinctly lower class of society, were not eligible for high public office and were generally held in low repute. As with the Greeks, the temples were the banks which the government bankers used, and the independent bankers, no doubt, did their business on the *forae* in a way similar to our curb business. The writer has been unable to find any record of the buildings in which these outsiders carried on their affairs and it is not unlikely that they, too, used the public depositories as safes. Several of the Roman emperors, it is known, discouraged the practice of borrowing and lending money for gain, by lending large sums without interest, against a suitable security.

The word "bank" which has come down to us is from the Italian *banco*, a bench. The Lombards, the earliest Italian bankers, had benches on the market place at which they lent and changed money and bills. When a banker failed, his bench was broken and hence we have the word "bankrupt."

The Venetians and Genoese of the early Christian era established banks, but ultimately in Mediaeval times banking as a business fell into the hands of the Florentines, whose financial position became so important that their affairs extended all over Europe, even to the extreme north, where loans were made contingent on their passing through the bank of Florence.

In Italy the oldest banks are those of Venice, 1157, the drapers' bank of Barcelona, 1349, the bank of Genoa, 1407. The last of these owed its origin to the debts of the state, as did also that of Venice.

In northern Europe the oldest bank is

the bank of Amsterdam, 1609, which financed the affairs of the enormous commerce of the Dutch East India Company. This bank was in charge of four burgomasters, who were changed annually and formed the model for most of the European banks now in existence which have varied in details according to local circumstances.

This short historical outline will suffice as a background and in a measure as a link, weak though it be, between the remote past and the marvelous growth of modern commercialism. Without the highly developed system of finance the business world of the present could not, of course, have been conceived and consummated. It is not, however, with the idea of giving careful consideration to the science of finance that some facts of its history have been here noted, but rather to lead up in logical fashion to a subject of more immediate concern: to show that modern bank buildings are the architectural expression of a problem which really has little or no definite precedent in antiquity.

The buildings in which modern banks are housed take their inspiration for the most part, from classic architecture. Nor is this surprising, as the earliest architectural reminiscences of bank buildings are the Greek and Roman temples, whose connection with the business of banking has been pointed out above. Of course, there was no such thing in classic times as a bank building pure and simple; it was only a part of the temple, just as the business of banking was but one of the activities of the keepers of that edifice. The type of building which we know as a bank is purely a product of modern times which has been considerably influenced by new developments in construction and interior equipment, as well as by those other influences which are potent in shaping other structures of a business nature.

The close and persistent relationship of modern bank design to classical architecture is apparent from two sides. The business of banking first took on importance during the golden age of Roman art and under its closest influences. Into this art the commerce-loving and most marvellous organizers the world has seen interwove certain ideas which our modern minds cannot help adopting as the most telling qualities of bank designing. Other peoples succeeded the Romans and brought with them or developed on the Roman foundation other forms and ideas of architectural moment, but it so happened that the centre of finance remained in that part of civilization which remained, and remains to this day, very Roman in its fundamental ideas. Let the reader answer for himself the question of the influence on Italian architecture of post-Roman architectures. The early Christian, Byzantine, Moorish, Romanesque and Gothic schools, what really important influence did they exert on the art which Italy inherited so long ago from the Caesars? True, each of these styles has representatives and worthy ones in the great architectural monuments of Italy, but none of these epochs made a lasting impression on the Italians who remained classicists throughout. So much so, that after they had exhausted their ingenuity without result, to adapt to their classical conceptions the outward forms of the architecture of strict logic, which we call Gothic, they felt compelled to go for further inspiration to the inalienable heritage which Rome left them. The result was the Renaissance from the influence of which even we in America have not yet found it possible to emancipate ourselves to any degree.

The recourse to classic architecture in bank design is not, however, without modern exceptions. One does occasionally encounter a bank building in which the forms of another art have found a happy application. The writer has in mind an exceedingly comely bank in Cologne on the Rhine, where the outward symbols, and, to some degree, the principles of Gothic architecture are successfully applied. We have such examples in this country. There is Richardson's Stock Exchange in Cincinnati and Leopold Eidlitz's Dry Dock Savings Bank in New York City, showing a

ready application of Romanesque forms while a more recent example of strong design which owes its direct inspiration to no precedent is the little Farmers' bank illustrated in the last November issue of this journal, by Louis H. Sullivan of Chicago, and again illustrated here.

After the question of general external appearance has been disposed of, the more important questions of planning and general conception of the problem present a baffling variety of solutions, especially in our own land, where no one bank seems to be planned in its details like any other. In fact, there enters into the problem of bank designing a very individual element, the peculiar relation of the bank to the community in which it is situated and the nature of the business which results from this relation. The conclusion is inevitable, that the designing of a bank is an important factor in its success, especially for an institution which depends upon the patronage of a very large number of depositors. The effect of the structure must be one of great importance and dignified simplicity. It must make on the depositors the impression of being a perfectly safe place in which to leave their money and valuables. The importance of the bank's prestige as established by its quarters is a matter which is nowhere better appreciated than in the United States, where the prevailing note in a well-designed bank building is a consummate expression of the importance of the institution and a certain mystery which adds immeasurably to dignity of the management. The impression which it is intended to convey by these words is a perfectly familiar sensation to the average American, whether he frequents banks a great deal or very little. In this respect the architecture of our banks exhibits surer signs of being on the right track than some other classes of American buildings. Even if a closer inspection of their architectural expedients cannot always call forth such praise, the presence of a broad conception does much to offset other shortcomings in our American bank buildings.

In proportion as the banks, as institutions, have become one of the most important elements of modern progress, so have the buildings which house them risen from a secondary position to one of great architectural prominence. Throughout the country there is hardly a small town which does not boast of one or more bank buildings, which, though they may not invariably be of great architectural consequence, are yet among the most pretentious constructions in their respective localities. Whatever the critic of architecture may say of the design of current bank buildings in America, each one of these structures represents for the architect a different and individual problem. The problem which it offers is, above all, the creation of a place in which the particular kind of banking business may be most conveniently and comfortably conducted. And, as may be said of any important industry to-day, no two banks have precisely the same kind of a business, nor do they carry on their affairs in exactly the same way. On the subject of banks one might truly restate, but in this case conversely, the oft-repeated saying about art and the arts: While banking is one, the banks are many. It cannot be said that architects, in America, at least, have yet shown that they have considered the problem to any extent in this light. Too often they have regarded the designing of a bank merely as the categorical satisfaction of a given set of detailed requirements dressed up in a conventional architectural attire to look important and imposing and be executed in splendid and costly materials. This attitude has produced, it must again be admitted, a certain feeling of largeness in conception and given them a popular standing. Breadth of conception is, without doubt, as much a virtue in architecture as elsewhere, but one cannot help feeling that this merit has at the same time produced some rather commonplace buildings to which it is not possible to take exception in any one particular. The general sameness of appearance in American bank buildings seems to result from the fact that our architects have produced in them a gen-

eral type without special regard for a further development of that type taking into account the varying factors of local conditions.

As in many fields of endeavor nowadays, imitation also reigns supreme in bank designing. This imitation has extended, not merely to matters of decorative effect, but to the plan when solutions which were evolved under a given set of conditions have often been made to answer requirements to which they were either utterly alien or at best only second-rate solutions. A rather convincing example of such misguided transplanting of precedent was recently brought to the writer's attention in the planning of a large banking room. Of such importance was it deemed to have this room as free of furniture and as imposing to the public as possible, that the working quarters of the staff were found to have been reduced to such an extent that it became necessary to place some of the important employees in another part of the building, where they were not as accessible as their duties demanded they should be. The effect of dignity was obtained, but at the sacrifice of a vital necessity; the arrangement of the plan had been impaired and the result, however imposing, cannot be called good design. Another rather amusing instance of superficial imitation occurred some years ago in New York, where a prominent bank had just finished a very imposing structure in which considerable exterior bronzework was used. This bronze work was presumably treated with an acid to wear off its newness. The result was a rich green patina, producing an effect which it was considered very important to obtain in other structures devoted to similar purposes, even if it had to be obtained in a spurious way by being applied on a cheaper surface which could never be expected to come by it naturally.

The interiors of our banks have, of course, suffered, along with almost every other kind of structure, from the products of the well-meaning though misguided decorator-contractor, who has been the means of spreading much gilded plaster and more elaborate wood and metal concoctions over and in them. The banks have, indeed, been a profitable market for his wares, which the glib salesman has successfully offered in glowing terms. But, after all, his "art" has at least an (appreciative?) audience; it is popular and thus far shows no signs of waning. Here, it would seem, is a serious question for the architect to consider. How to reach the owner and to reach him as effectively as the salesman of the "decoration" house is doing it today. It is the same old question of Commerce versus Art, and the owner being, by training and experience, wholly in sympathy with the ideas and ways of the man of business, naturally gives a willing audience to what he has to say. This gives the salesman an almost insuperable advantage, though he may be only repeating a well-rehearsed "line of talk." He experiences little difficulty in making the impression necessary to land the "order" for his house. His arguments are concrete and he can show the prospective customer the goods. The architect, on the other hand, professional man that he is, presents to his prospective client ideas which are often little understood or not understood at all. He cannot show samples of what he proposes to offer, or, if he can, even these must be so largely supplemented by ideas that his case is not materially strengthened thereby. His only hope lies in securing the confidence of the client in his ability to interpret his requirements, which, barring the personal equation, he can do only if that client has trained himself to see the difference between purchasing the capacity to design economically and appropriately and purchasing merely in vacuuo a consignment of materials which may or may not be appropriate for his building or economical for his business. The distinction is one which is rather to be felt than described in so many words. It implies, in the building public, a real discrimination which can result only from a more thorough interest in matters of building and design. It is the architect himself who must undertake a large share of this popular education in these

matters. He needs it to maintain his rightful position and especially in this country, where the "decorator" on the one hand and the engineer on the other, are making serious inroads into his business. Their aims are just as legitimate as his, it is true, but their activities often infringe on and anticipate his to such an extent that he is wrongfully placed in a subordinate position, to the frequent danger of his own work and professional reputation. A building is conceived by him, only to be turned over in the rough to a "decorator" to be decorated. The result is unfortunate and stands as a criterion of the architect's achievements. In another case the design of a structure is practically determined to a nicety by an engineer (whose aim, it is always admitted, is perfectly legitimate) whose work, which consists in providing the utmost stability with the minimum of material, cannot, properly, be considered ahead of the architect's task, the disposition and arrangement of the parts into a harmonious whole. The architect takes hold of the project at this stage and is asked to "design" it outside and in. Again, the result is incoherent and unsatisfactory from the point of view of design. Many of our banks show how the misapplication of these agencies of building and design work out in practice.

The statement made above that there is a great sameness among American bank buildings must not be interpreted too literally. Perhaps it should be qualified by adding that the sameness referred to is intended to be understood as applying to those cases where identity of site conditions and size of building required have resulted in widely separated localities, in structures which are very similar whereas they have every reason to be dissimilar. Of necessity there can be but a limited number of different situations of the lot in relation to street or streets. In a large city where ground is exceedingly valuable the opportunities for a free and unobstructed bank site are practically out of the question. A corner on a wide avenue or on a public square is abo.. ... most favorable location that can be hoped for. Corner banks seem to grow more and more numerous in proportion to the number of banks built annually. Among the many that we illustrate this type greatly predominates. Another interesting type of plan though still rare is that which has frontages on two streets by means of an L-shaped lot, narrow on the more important thoroughfare accommodating the entrance and entrance corridor and widening out into a good-sized banking room on the less important street where it is possible to get more floor area than a bank could afford if situated entirely on the more important thoroughfares. Of this class of bank buildings two notable examples were recently built in New York and published in these pages. The National Park Bank and, more recently, the Chemical National Bank, both near the financial district in New York, where large sites, especially for bank buildings, designed with little or no rentable area, are extremely scarce. The problem of designing a bank on such a site is a difficult one, both in planning and in its outward design, entailing especially a very careful compromise between the relative exterior importance of the two fronts. In the natural course of events the front on the principal street should present the most pretentious external aspect, being the entrance to the bank proper. The narrow frontage of this member, however, as compared with the wide one of the main banking room makes this a difficult matter to adjust considering a certain importance which must, at the same time, be given to the latter. In the Chemical National the architects have taken advantage of the character of the adjoining buildings to make the entrance member a one-story structure, preserving in the large domical banking room enough reminiscence of detail to satisfactorily explain the connection of the two outwardly separated parts. Despite the success of this design and of that of its predecessor, the National Park Bank, this type does not seem to have encouraged any imitations, so far as the writer has been able to discover. In fact, another important bank in the same vicinity of New York

has recently built itself new quarters, but on totally different lines. The bank in mind is the Importers' and Traders' National at the corner of Broadway and Murray Street. The block on which this building is situated offered, no doubt, opportunities to do what the National Park and Chemical National chose to do, but the Importers' and Traders' decided to use the narrow corner lot which they already owned and to break away from the traditional American form of having a large concentrated one-story room in which the entire staff is placed and the business transacted in constant view of its patrons. The plan which they have adopted and which their architect has successfully developed consists in classifying the different departments and placing each one on a separate floor. This has resulted in a six-story structure, taking into account not only the present needs of the institution, but providing two extra floors for future growth. Architecturally, the exterior of the building expresses the fact that the entire structure is devoted to the uses of the bank by means of the colossal Corinthian order reposing on the basement which embraces all the floors, the uppermost being in the entablature and lighted from above. Practically, the plan is said to work admirably. Have we not here the solution of an individual problem in an individual way? Whether the same idea would work equally well for another institution could only be determined by the nature of the functions to be performed. At any rate, it is a new word in bank designing and suggests the value of a closer study of the subject, for the banker as well as for the architect on restricted corner sites. On an inside lot the solution would, of course, be impractical, on account of the difficulty of obtaining sufficient daylight to properly illuminate the various floors.

The most progress in bank design has undoubtedly been made in what might be called the machinery of the banking business, the special equipment of the building. In a banking room matters of prime importance are the compactness, convenience and accessibility of its furniture and the system of handling its documents, securities and cash. In the conduct of business the utmost simplicity and system must be observed. For instance, the closest and most convenient connection must be established between the vaults and the working space of the employees in whose charge are the valuables which have each day to be conveyed to and from the safes and vaults. It is to these important matters of management that great attention has been paid in our recent banks, resulting in every new important bank, in something more improved and better planned than that which it succeeded.

In illustrating the bank buildings which are shown in this issue, the object has been chiefly to show what has been designed in the last few years in this class of buildings in different sections of the country. The distribution is accordingly wide and the examples typical as far as it has been possible to obtain sufficient material for selection in a given territory. Variety also is to be found as far as it exists in buildings devoted to purposes of banking. Several different types, at least, are to be noted. There is the bank in the small town, of which the Farmers' National of Owatonna, a small town in the heart of Minnesota, has been so characteristically rendered by Mr. Louis H. Sullivan in his individual way. Contrast with this the little country bank, the Marine National at Wildwood, New Jersey, adhering as closely as possible to the accepted thing for an American corner bank. We might expect to meet it in any enterprising town in the East, or the West for that matter. Its design reveals nothing of the individual character of the institution. It is simply a bank whose design does not in any particular cause displeasure, but neither does it tell any story of the life which passes within. It is of the class of banks which exhibit the traditional adherence to precedent and turn their backs on individuality. To suggest how else this particular bank might have been moulded to give its proper individuality, it not an easy task. That [illegible] for the artist. Mr. Sullivan has done [illegible] at Owatonna and there is no

telling how he would have solved the problem, or if it had been presented to him, to design a bank for a small town in the Pennsylvania coal regions. This designer is, without question, pointing a new direction for architectural thought, which clearly is not a fad. On the contrary it seems to be founded on a solid basis of knowledge aided by strong artistic instincts. As a result of his close study of the skyscraper problem, his work has thus far been almost exclusively confined to that kind of structure. In the future we shall hope to hear from him in new fields of design.

The corner bank of a single story in the East is well represented among our illustrations by two dignified buildings in Boston, the New England Trust Co., by Messrs. McKim, Mead & White, whose best work in that class of bank design still remains; that Fifth Avenue structure for the Knickerbocker Trust Co. which was so fully published in this journal as a gem of modern Renaissance architecture. In the New England Trust Building these designers have forsaken, no doubt for good and sufficient reasons, the treatment of the colossal Roman order for the lighter and more delicate wall arcade. The resulting design fits in well with its surroundings and expresses the greater conservatism of the New England banking institutions over their New York neighbors. The other Boston bank referred to, namely, the Commonwealth Trust Co., shows a bolder and more vigorous handling of the design. The problem in this case was similar to that of the New England Trust, but the architects, Messrs, Parker, Thomas & Rice, have not chosen to take much account of the conservatism of Boston business methods. The plan of this bank reveals, moreover, a highly unusual consideration for the convenience of the pedestrian who has to pass in front of the building. The rounding of the corner is of such a nature that the sidewalk is very narrow at the intersection of the streets where it should, if anything, be wider than anywhere else. This desirable end has been brought about through the liberality of the bank in sacrificing a portion of its lot area and the architects have made use of this cutting off of the corner to greatly simplify their plan and square off the banking room and offices. The shearing of the lot is likewise turned to the advantage of the exterior design. The curve which has been imparted to the front is agreeable and aligns the building agreeably with its uninteresting neighbor, while it permits the juncture of its two façades at an angle which is not too obtuse to disturb the apparent stability and squareness of the corner pier. It is also to be noted that the architects have avoided the use of the regular cornice features which tradition prescribes for the Corinthian order, for the reason that such a feature as the far projecting bracket of the order would have done much to defeat the advantageous solution of turning the corner which constitutes, in fact, the most important part of the exterior design of the building.

Two other Boston banks, which we illustrate, the First National and the Cambridge bank exhibit the discreet average of American bank design without any startling innovations, unless such innovations be the splendid equipment of the former.

Among the more monumental buildings of the selection are four, in which a dome or domical ceiling gives significance to interior or exterior or to both. They are the Girard Trust Company of Philadelphia and the Bank of Montreal by Messrs. McKim, Mead & White, the Cleveland Trust Company, by Messrs. George B. Post & Sons, and the Suffolk Savings Bank in Boston by Mr. Cass Gilbert. Of these, in the Girard Trust and Cleveland Trust, the dome is the all-dominant note of the composition, while in the other two the dome is of secondary importance or, in the case of the Suffolk Savings Bank, only of account for the interior design. In point of importance the Bank of Montreal stands first among the banks illustrated in this issue, as well as being, from the standpoint of the architect, one of the most important bank buildings in America. As it stands today, it is practically

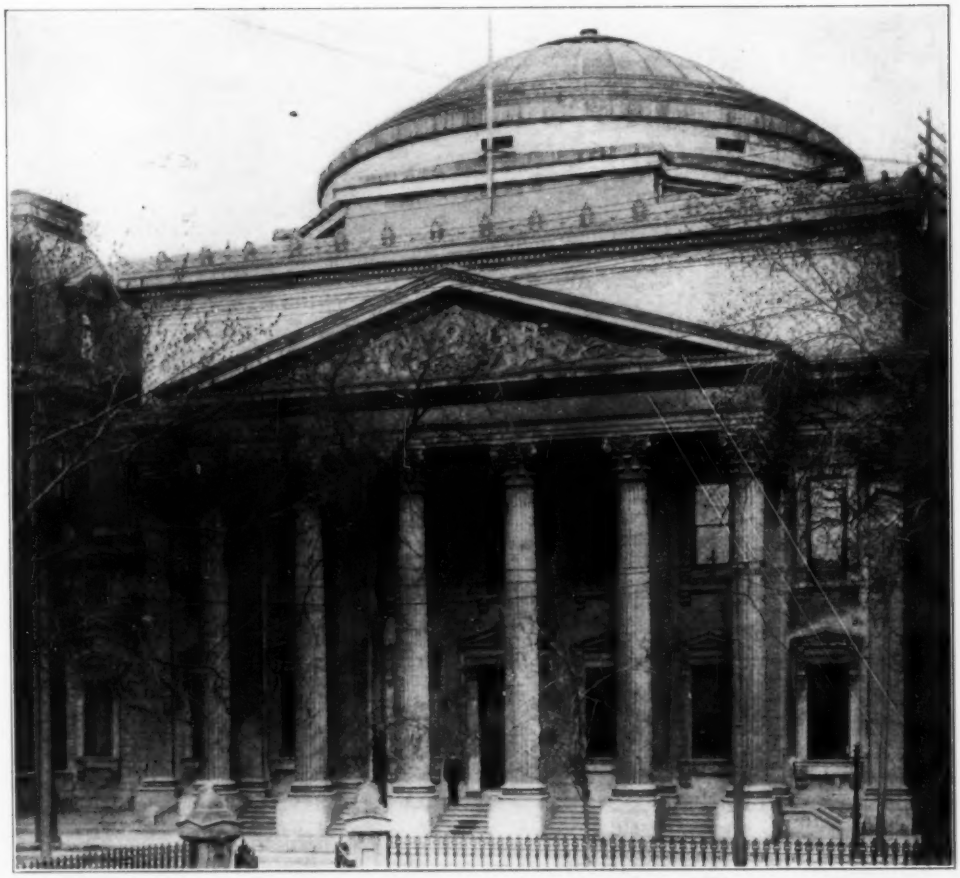
an entirely new edifice, the only visible part of the structure which preceded it being the pedimented colonnade through which the entrance leads by means of a monumental corridor into the great banking room, one of the most impressive of its kind in existence. It is a room of such colossal proportions that few designers would be apt to handle it with such consummate skill and dignified simplicity. This building shows emphatically that element of largeness of conception and thoroughness of scholarship which is the contribution to American architecture of the firm of McKim, Mead & White. There are those who will refer to this phase of our architecture as book architecture and archaeology, but, even admitting such a point of view, it is impossible to shut one's eyes to what it has accomplished in establishing a higher standard of popular taste. Its influence has been far-reaching and sure penetrating by means of the work of this firm of architects and through the work of men trained by them to the remotest parts. Other designers also have been influenced by their buildings and have rendered the fruits in their own work according to their ability and training. In the two small banks at Charlotte and Battle Creek have we not instances of such influence? Here in two small Michigan towns we find these buildings standing out in contrast by their largeness and simple motives, to utterly commonplace surroundings. Their designer has undoubtedly been influenced, though unconsciously and indirectly, by work of the type alluded to above, and the importance of the bank, as an institution, has given him the opportunity to express this influence. If this conclusion were based on an inspection of the treatment of the detail, it would, doubtless, be invalid for that clearly bespeaks contact with the methods of the Ecole des Beaux Arts, but the origin of the design lies, we believe, deeper down in the subject and nearer home. It shows a hopeful condition, indeed, to find institutions in the romoter and less important places, in point of size, attaching so much importance to the appearance of their bank buildings to want them designed with a consideration for architectural propriety. This seems to be the feeling everywhere, affording the competent designer new chances to plead his cause effectively and in concrete form.

Among the monumental structures which, during the past five years, have been produced in our national capital, the bank buildings fully hold their own, not only in number and size, but in the architectural importance of the buildings as well. Washington as a city has been particularly fortunate in its recent bank buildings. The two which we publish, the National Metropolitan and the Union Trust, are fairly typical of the best class of banks which have recently been erected there. Both of these structures show a happy compromise on the part of the designers, as well as a sacrifice on the part of the institutions to produce the substantial results which have been attained. It was a condition of the problem in designing these two buildings that the banks could not afford to occupy entirely for their own uses all the space which the improvement of the site made necessary. The problem was thus complicated with that of a real estate speculation, but the bank, especially in the case of the Union Trust Company, was desirous of occupying a large share of the most desirable space in its new building. It realized the necessity of obtaining some small return on its investment and to obtain this return it was willing to slightly modify its plan, but the presence of the tenants must not materially incommode or confine the freedom of its actions or impair the outward appearance of the building as a symbol of the institution's individuality. These conditions the architects, Messrs. Wood, Donn & Deming, have happily expressed in the Union Trust Company's new building. The narrowness of its corner lot would under ordinary conditions present a problem full of difficulties of design, but with the added conditions which were here imposed the difficulties measurably increase and the solution which has satisfactorily met so many of them is to be commended in proportion.

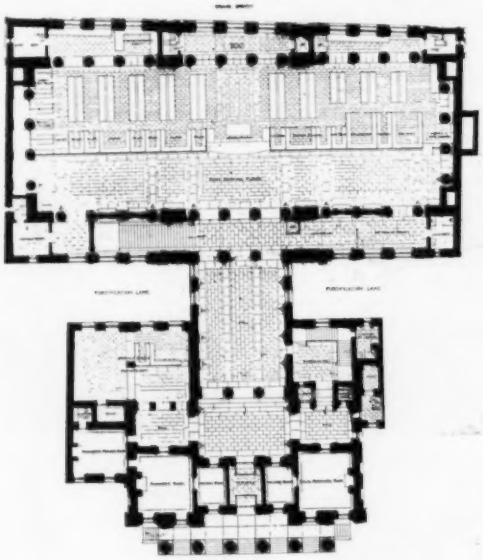
The moral effect of an imposing structure which leaves no doubt of its purpose is a fact well recognized in business, and banking is no exception to the rule. Of course, there are banking institutions whose position in their community is perfectly established and which depend for their success upon a limited number of very large business transactions. They appeal to a very select and small class of depositors on whom the bank could hope to make no more favorable impression by erecting an imposing structure which would forego the moderate return on a large real estate speculation. Such institutions have done as have several whose buildings are shown in this issue. Notable among these are the Corn Exchange National Bank, the Commercial National of Chicago, the Third National of St. Louis, and the Knickerbocker Trust Co. on lower Broadway, in New York, whose huge skyscrapers, while not at all bank buildings in an individual sense, are monuments to the importance of banking institutions in developing real estate on an enormous scale.

DIME SAVINGS & TRUST COMPANY.

Peoria, Ill. J. E. Tabey, Architect.



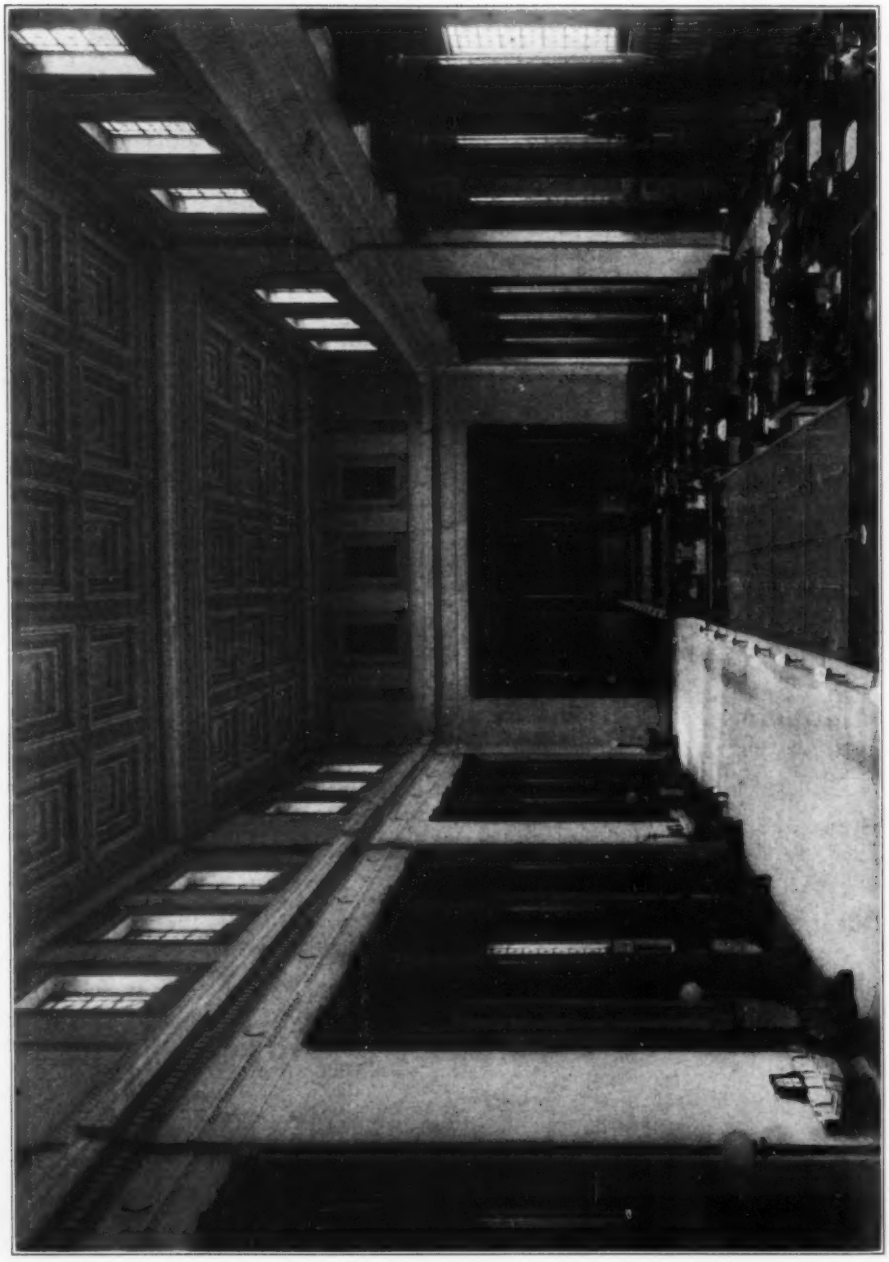
The impressive entrance to the new bank retains the monumental pedimented columns of the old structure.



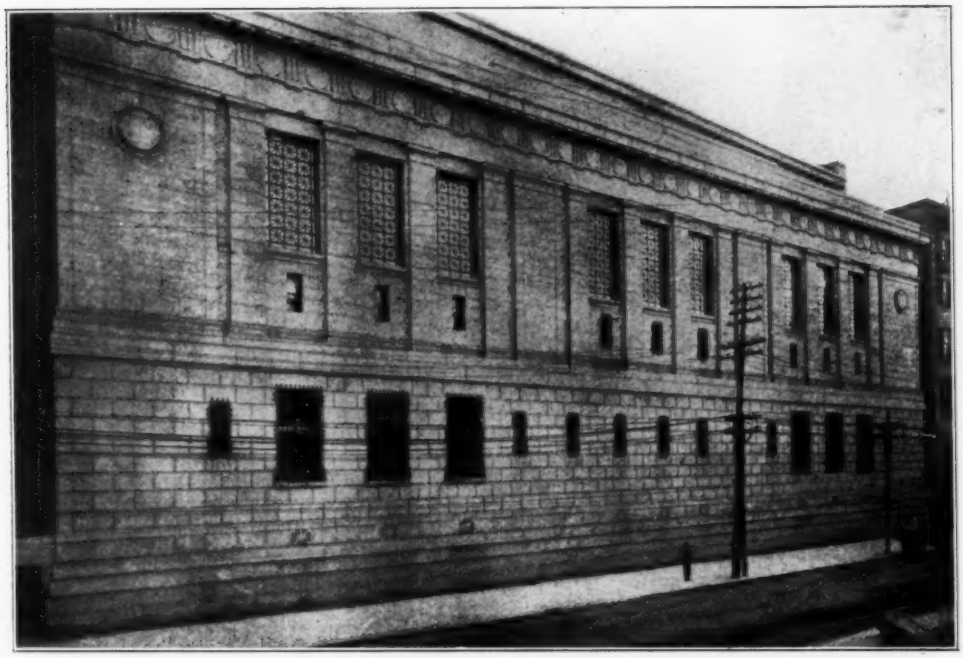
Plan.

THE BANK OF MONTREAL.

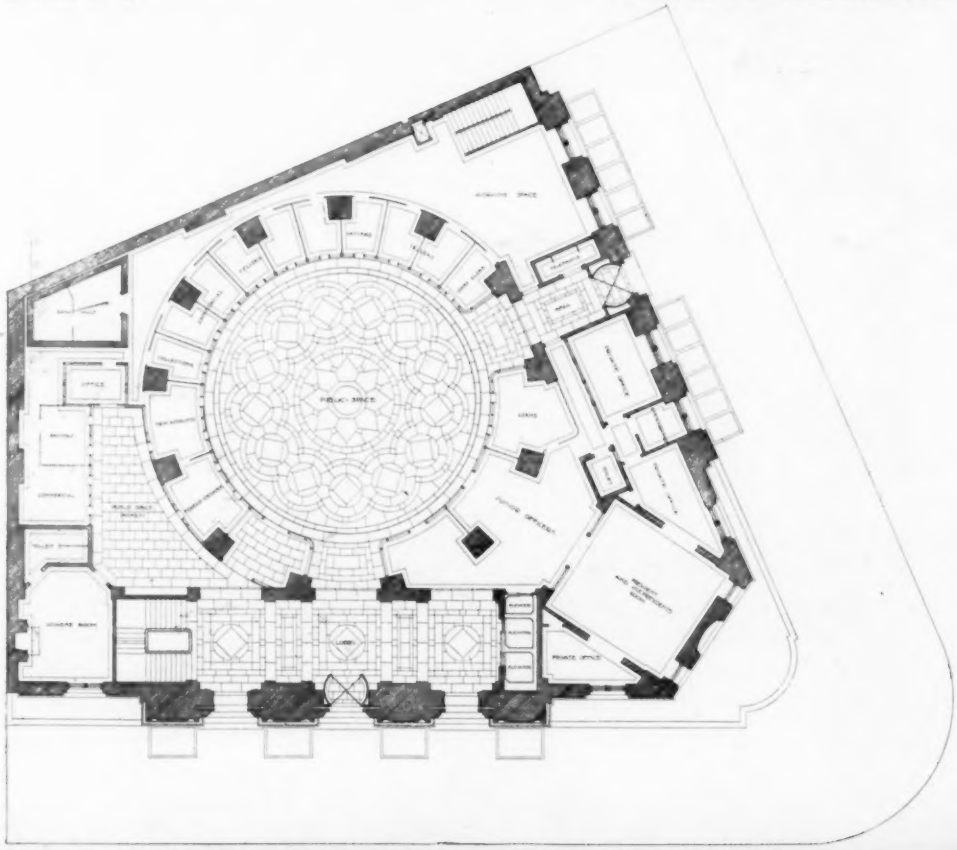
Montreal, P. Q. McKim, Mead & White, Architects.



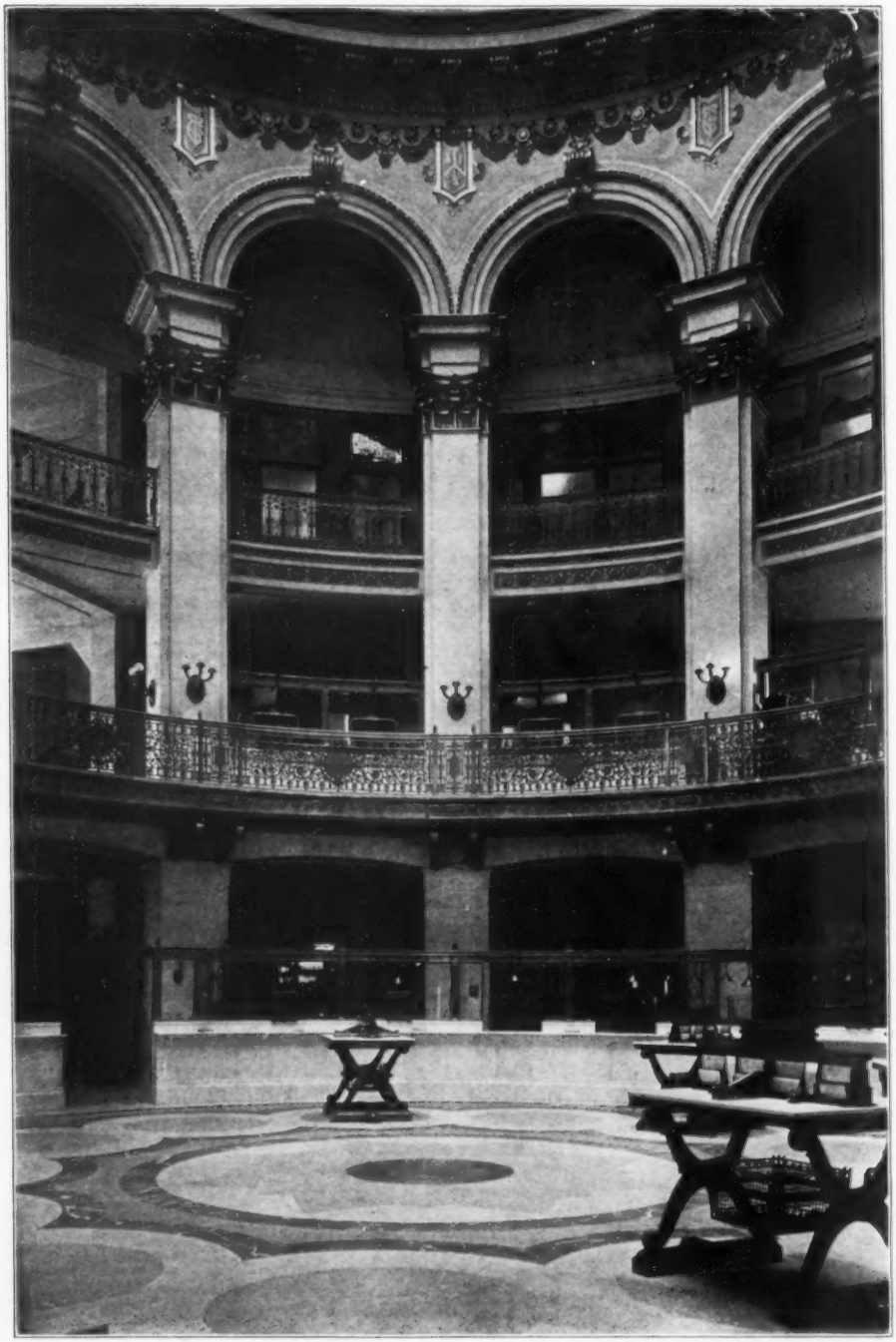
THE GREAT COLONNADED BANKING ROOM—BANK OF MONTREAL.
McKim, Mead & White, Architects.
Montreal, P. Q.



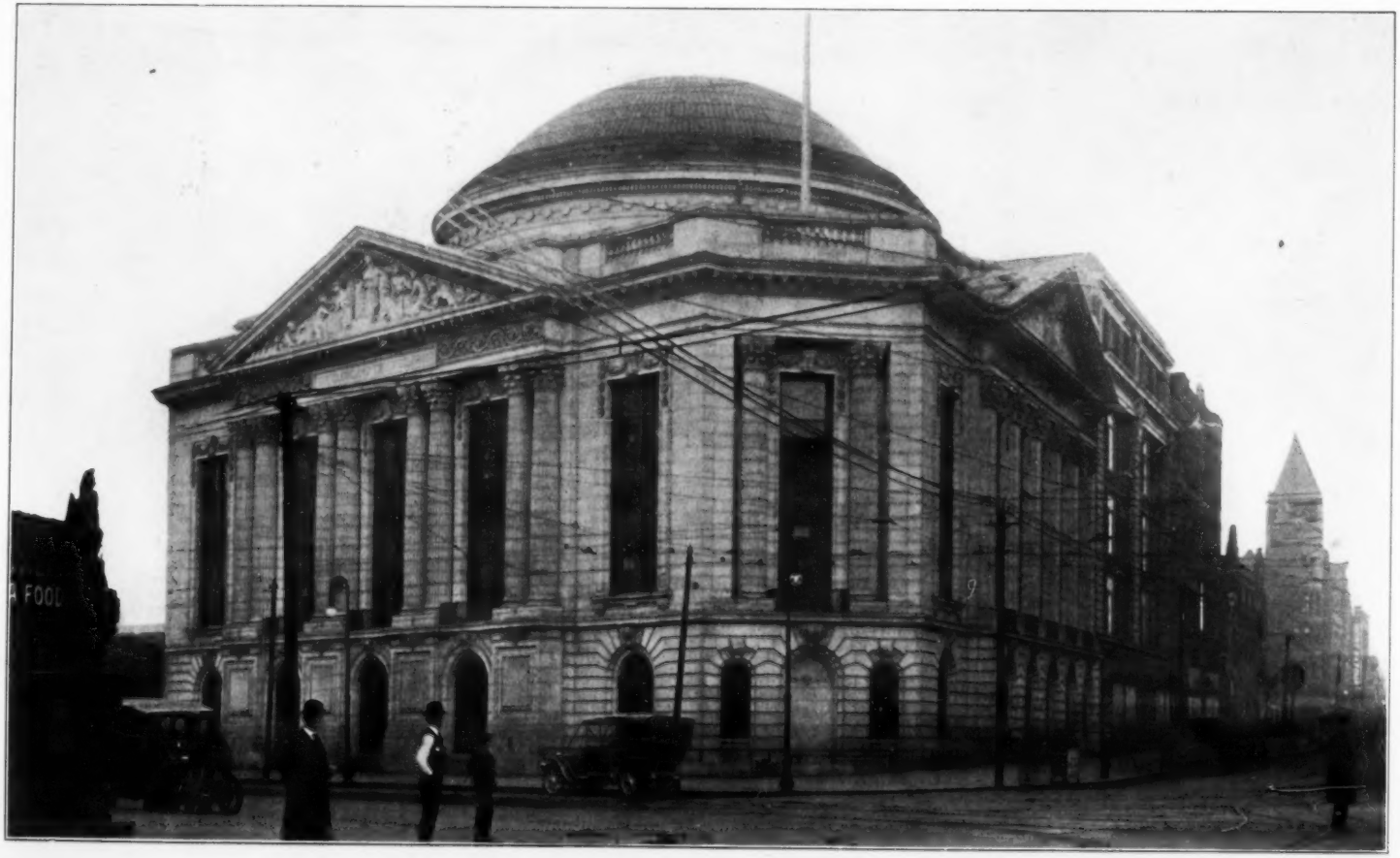
THE FAÇADE BEHIND WHICH IS THE GREAT BANKING ROOM—BANK OF MONTREAL.
Montreal, P. Q. McKim, Mead & White, Architects.



PLAN OF BANKING ROOM—CLEVELAND TRUST COMPANY.



THE DOMICAL BANKING ROOM—CLEVELAND TRUST COMPANY.
Cleveland, O. Geo. B. Post & Sons, Architects.



Cleveland, O.

CLEVELAND TRUST COMPANY.

Geo. B. Post & Sons, Architects.

Philadelphia, Pa.

GIRARD TRUST COMPANY.
McKim, Mead & White, Supervising Architects.
Furness, Evans & Co., Associated.

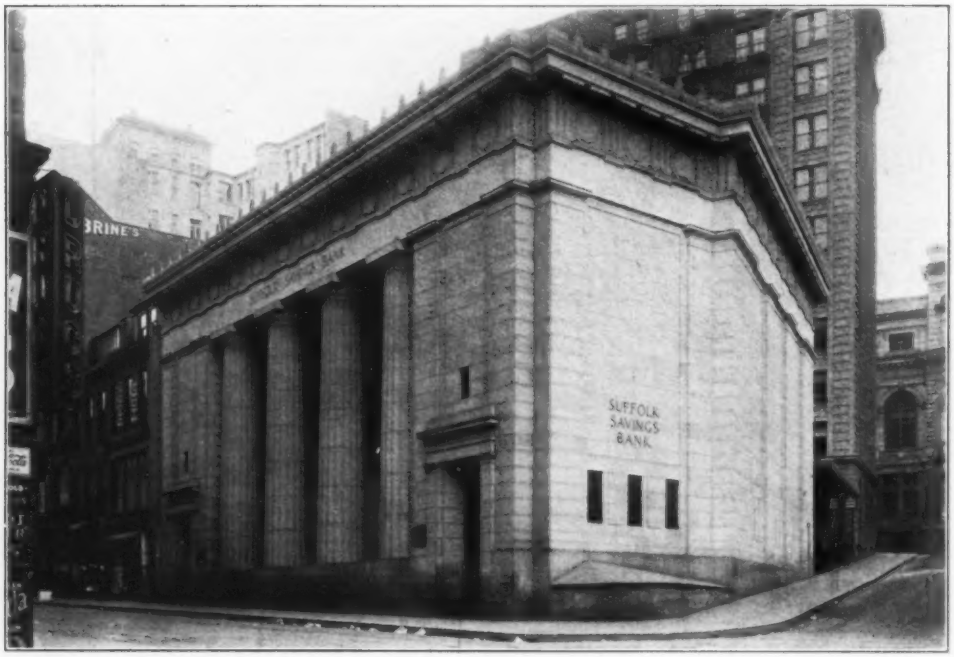
View in banking room, showing also the bottom of the coffered dome.

Looking up from the vault, the circular aperture which is also visible in the view on the left.

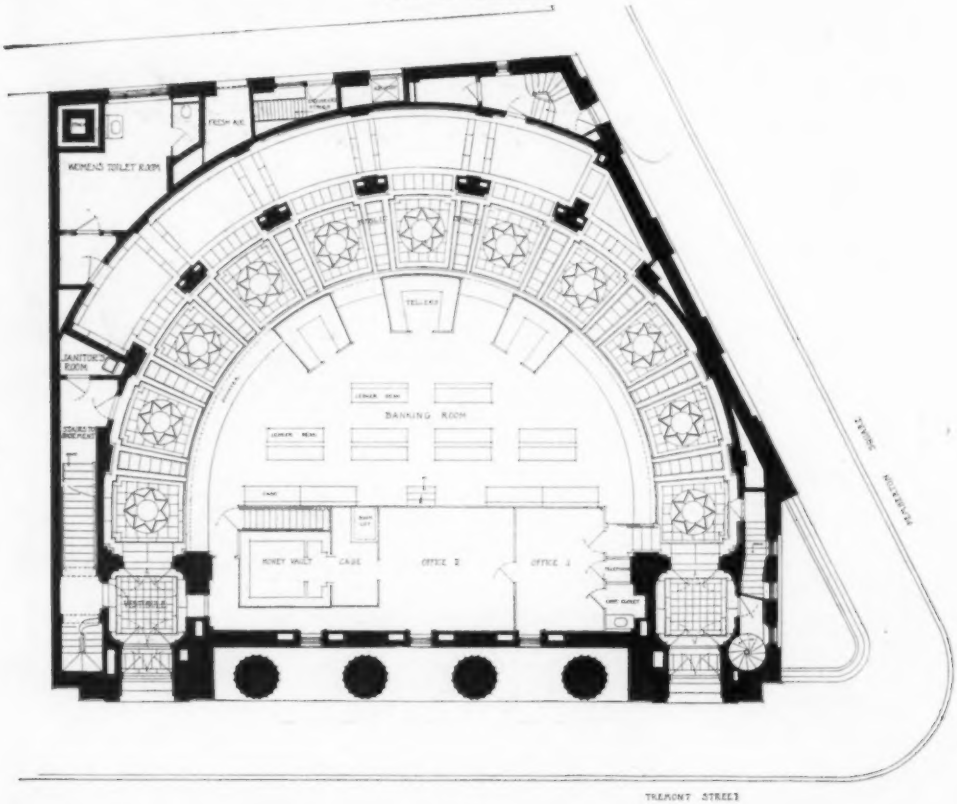
Philadelphia, Pa.

GIRARD TRUST COMPANY.

McKim, Mead & White, Supervising Architects.
Furness, Evans & Co., Associated.



View of exterior.

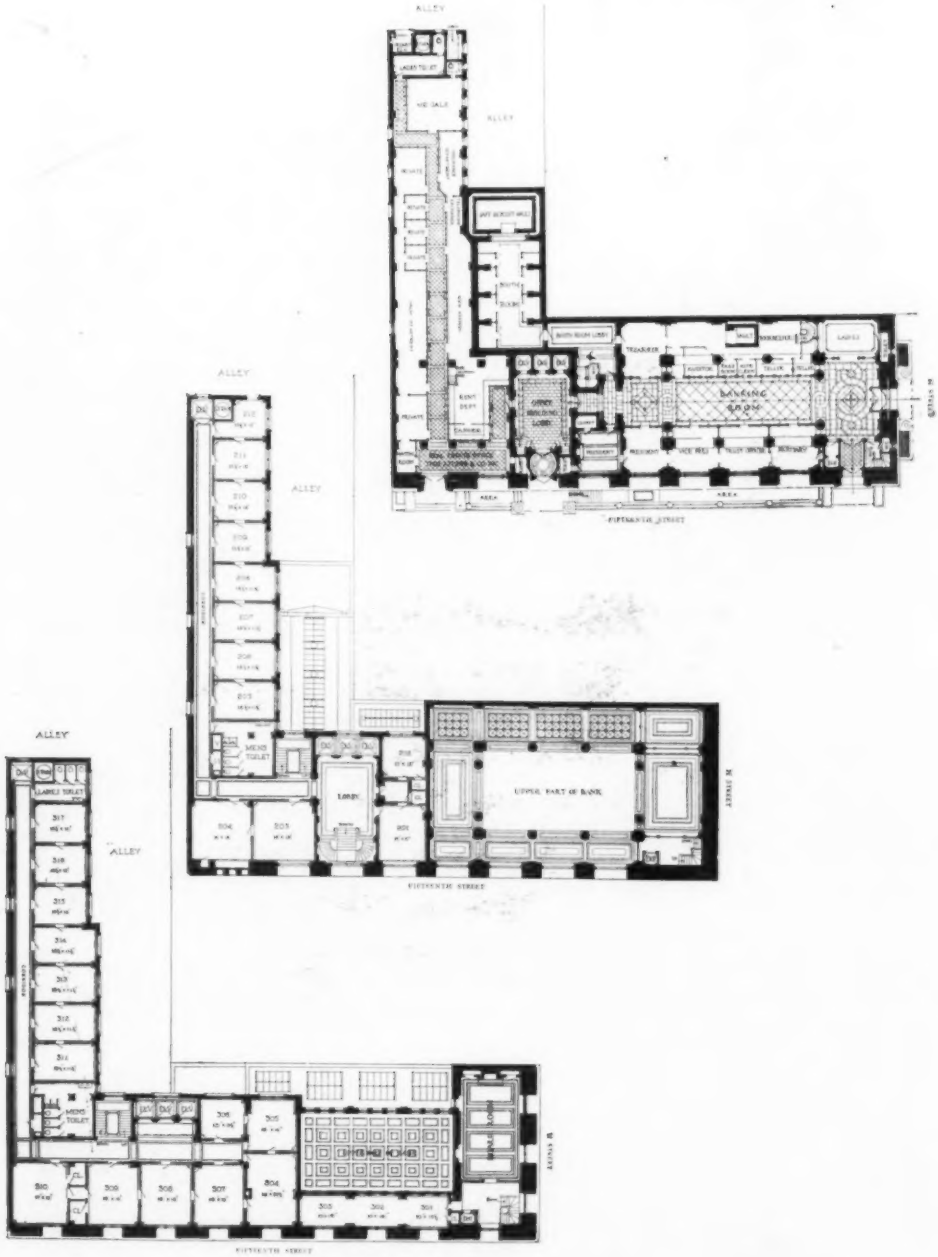


Plan.

Boston, Mass. **SUFFOLK SAVINGS BANK.** Cass Gilbert, Architect.

View from the corner of Fifteenth and H Streets.

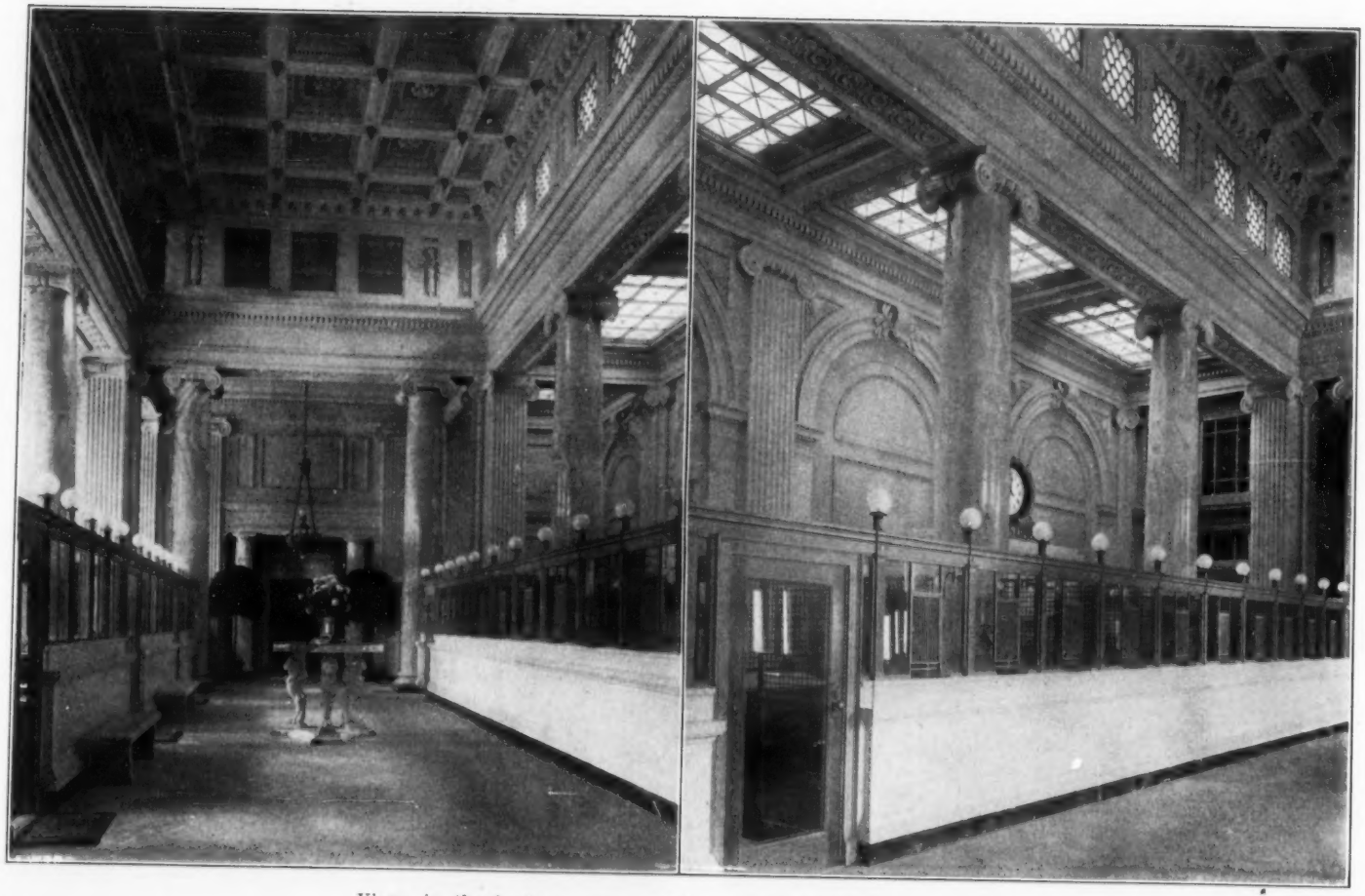
Washington, D. C. UNION TRUST & SAVINGS BANK. Wood, Donn & Deming, Architects.



Plans of banking floors.

UNION TRUST & SAVINGS BANK.

Washington, D. C. Wood, Donn & Deming, Architects.

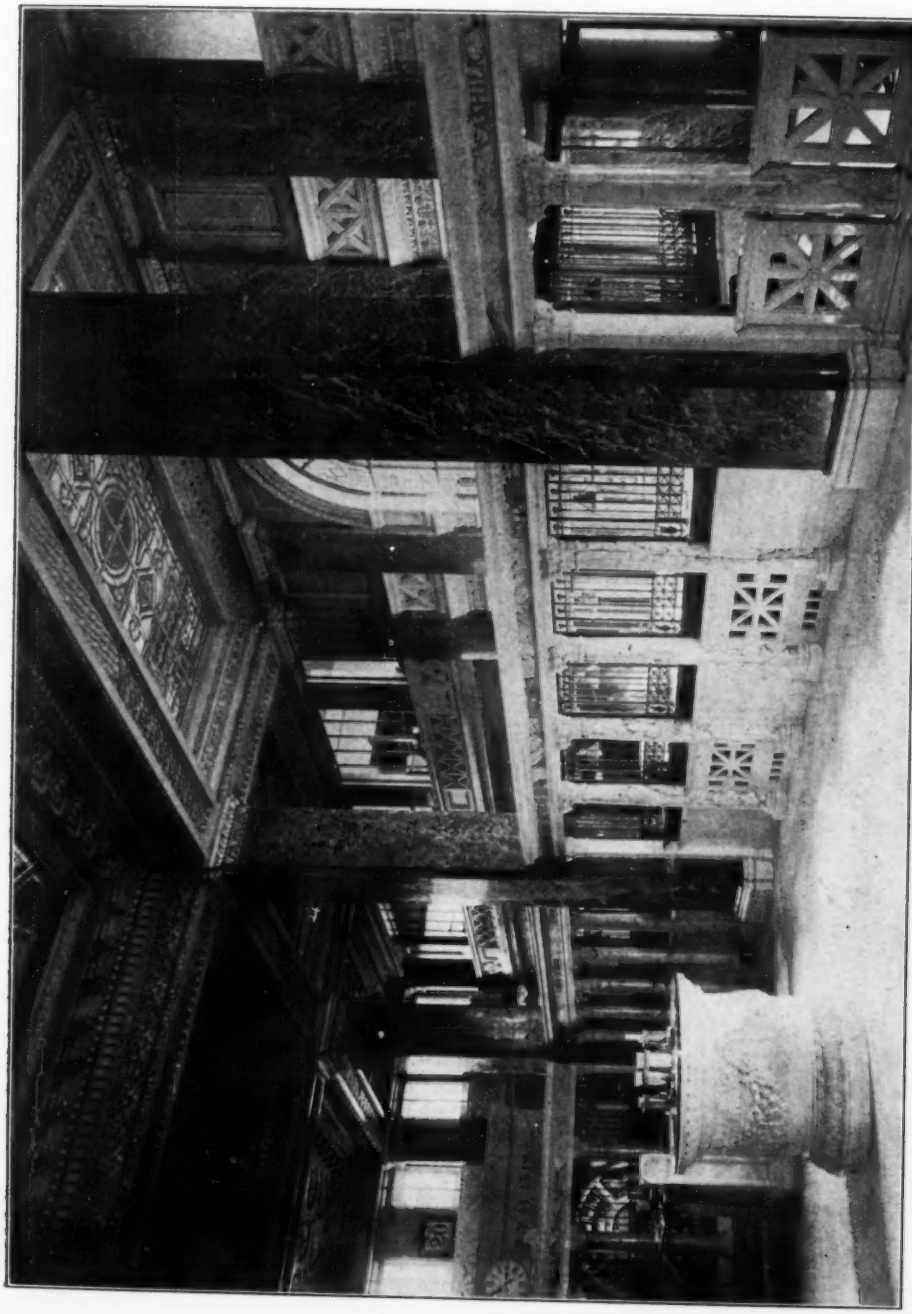


Views in the banking room, which extends through three floors.

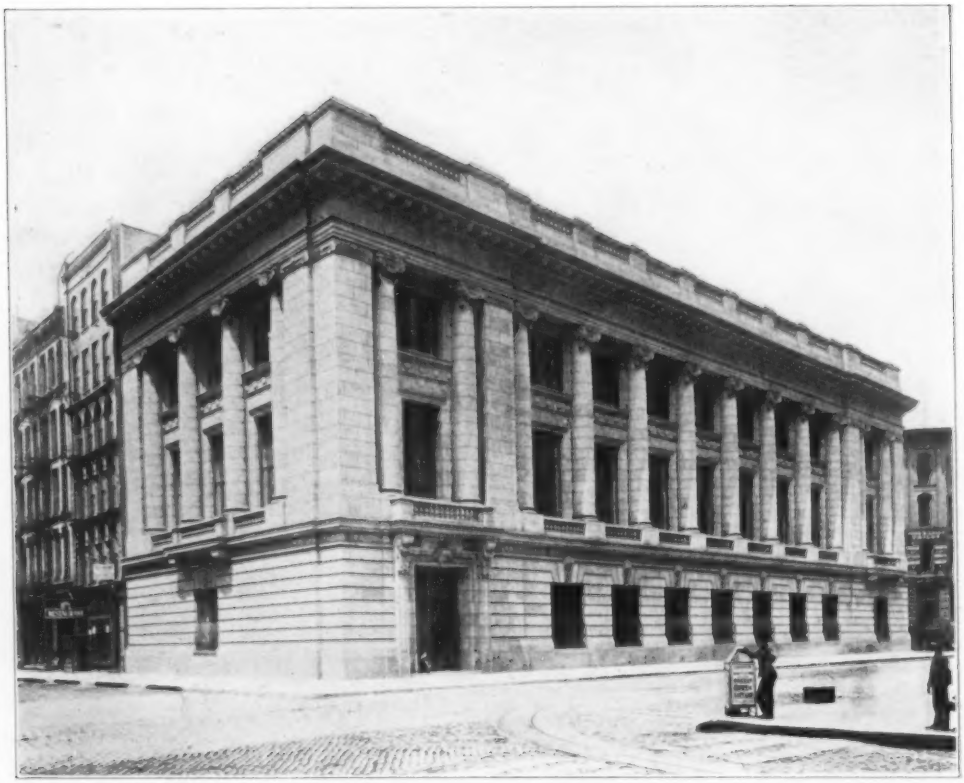
Washington, D. C. UNION TRUST & SAVINGS BANK. Wood, Donn & Deming, Architects.

NATIONAL METROPOLITAN BANK.

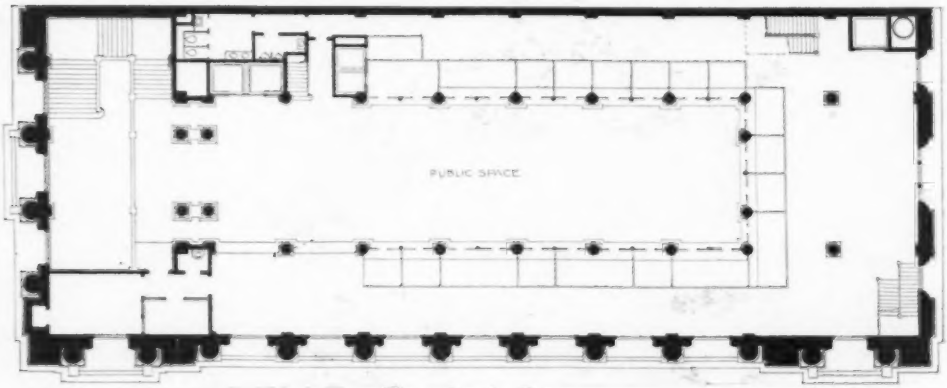
Washington, D. C. B. Stanley Simmons, Architect.



View in banking room.
NATIONAL METROPOLITAN BANK.
Washington, D. C.
B. Stanley Simmons, Architect.



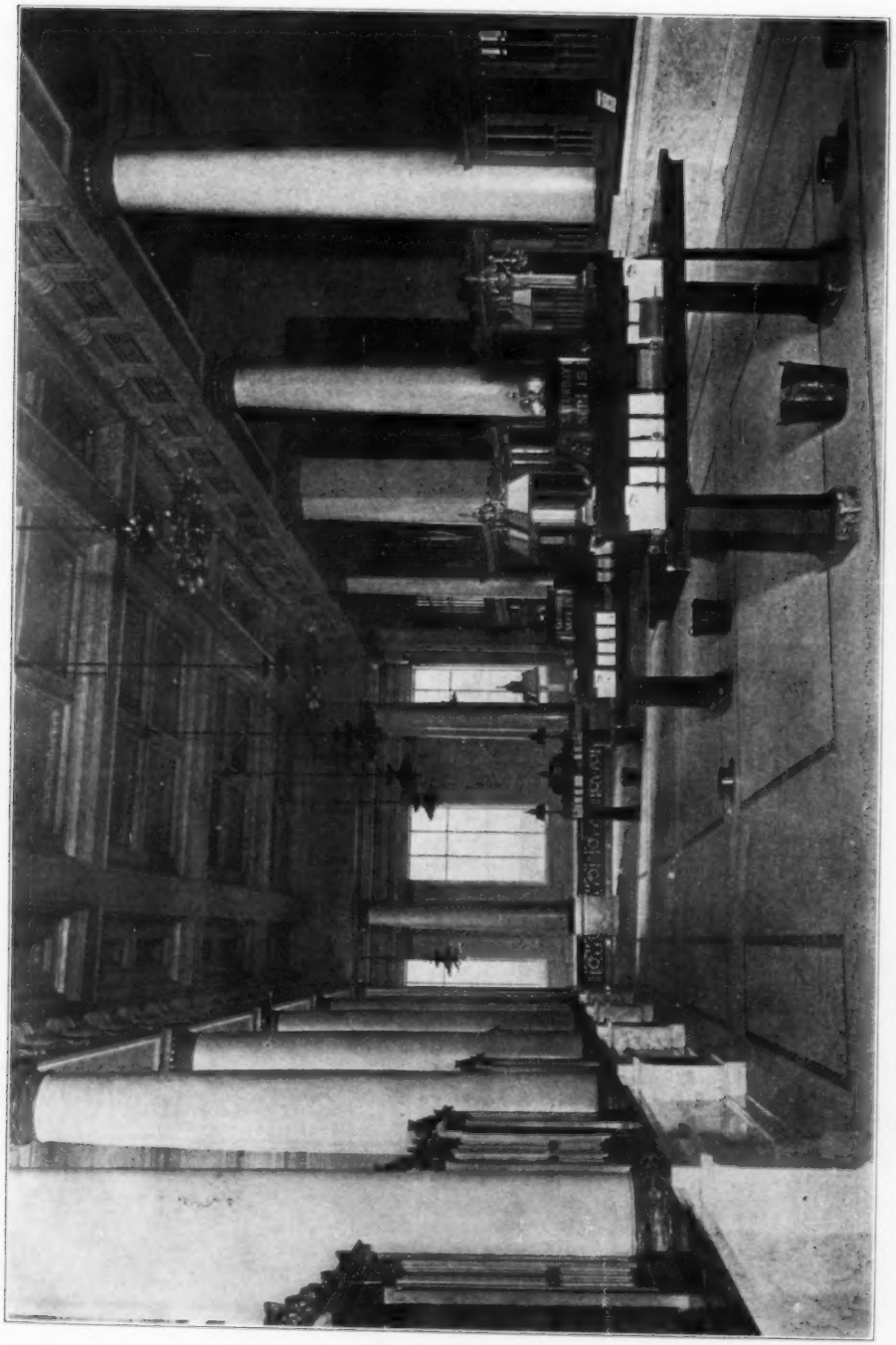
View of exterior.



Plan of main floor.

NORTHERN TRUST COMPANY.

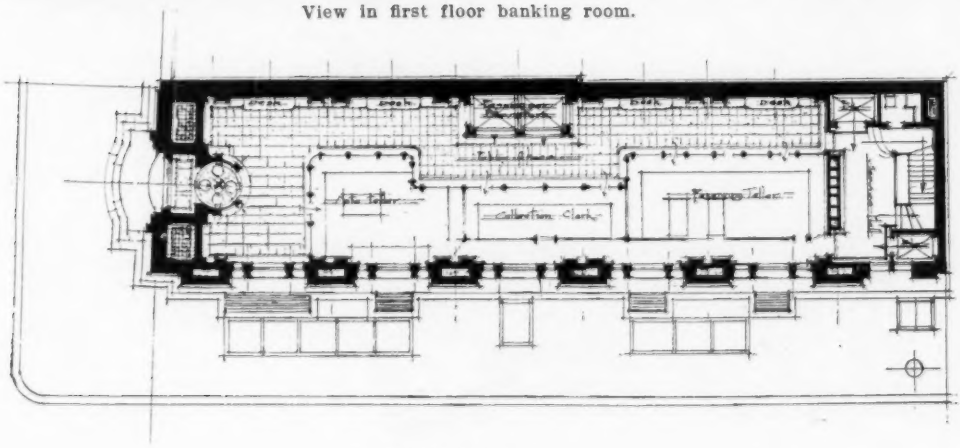
Chicago, Ill. Frost & Granger, Architects.



THE GREAT COLONNADED BANKING ROOM—NORTHERN TRUST COMPANY.
Frost & Granger, Architects.
Chicago, Ill.

THE IMPORTERS' & TRADERS' NATIONAL BANK.
Murray Street and Broadway, New York. J. H. Freedlander, Architect.
(Photo by A. Patzig.)

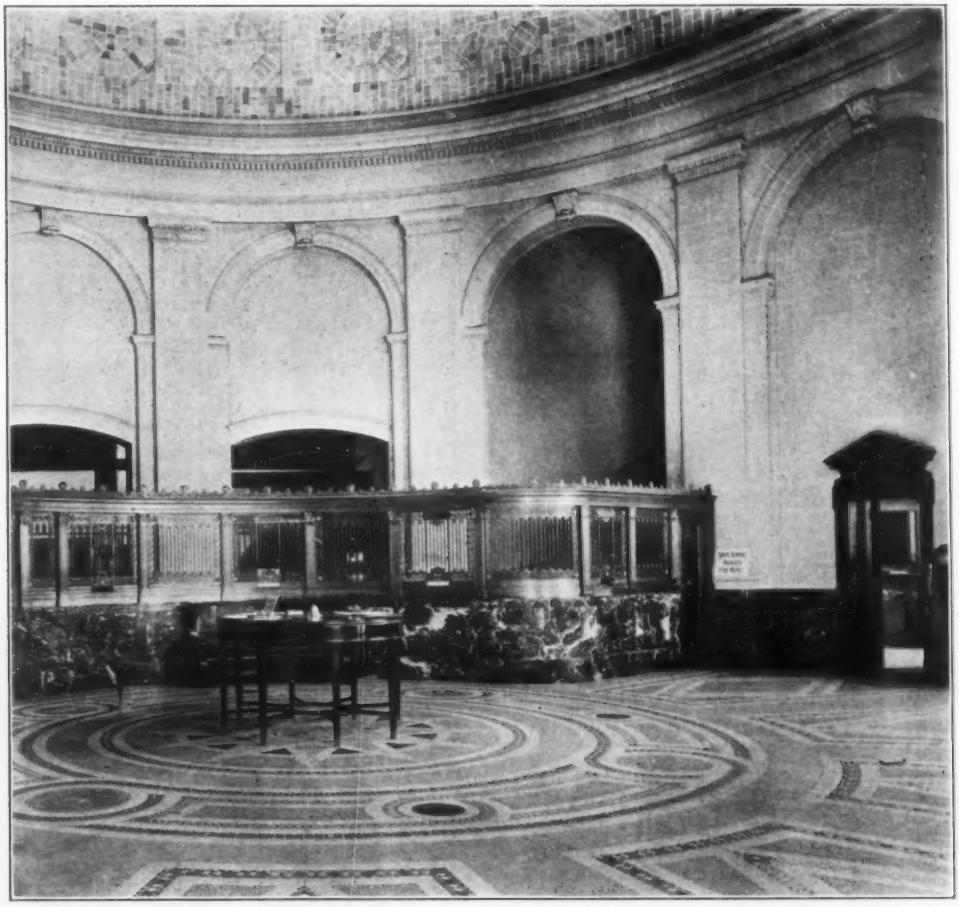
View in first floor banking room.



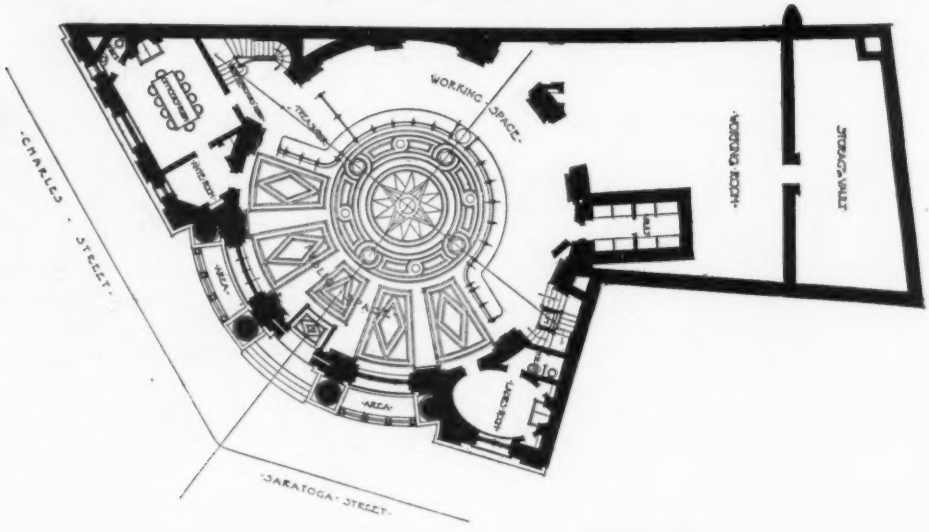
Plan of first floor.

IMPORTERS' & TRADERS' NATIONAL BANK.

Murray Street and Broadway, New York. J. H. Freedlander, Architect.



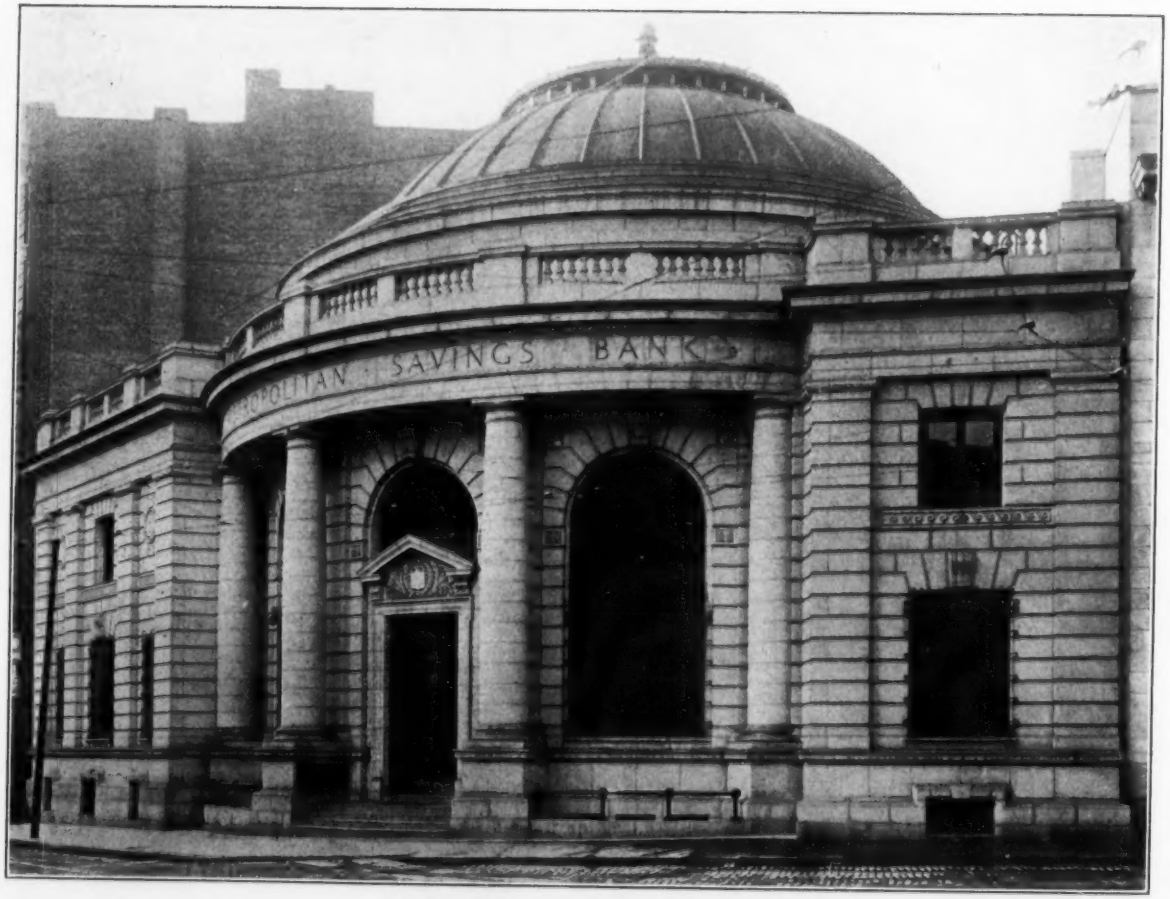
The domical banking room.



Plan.

METROPOLITAN SAVINGS BANK.

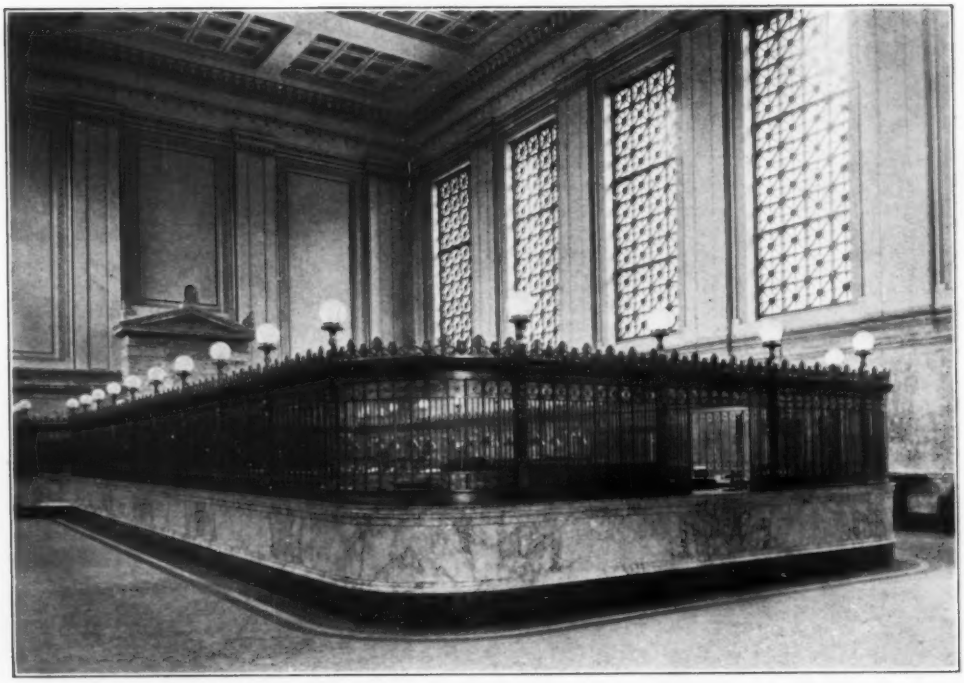
Baltimore, Md. Parker & Thomas, Architects.



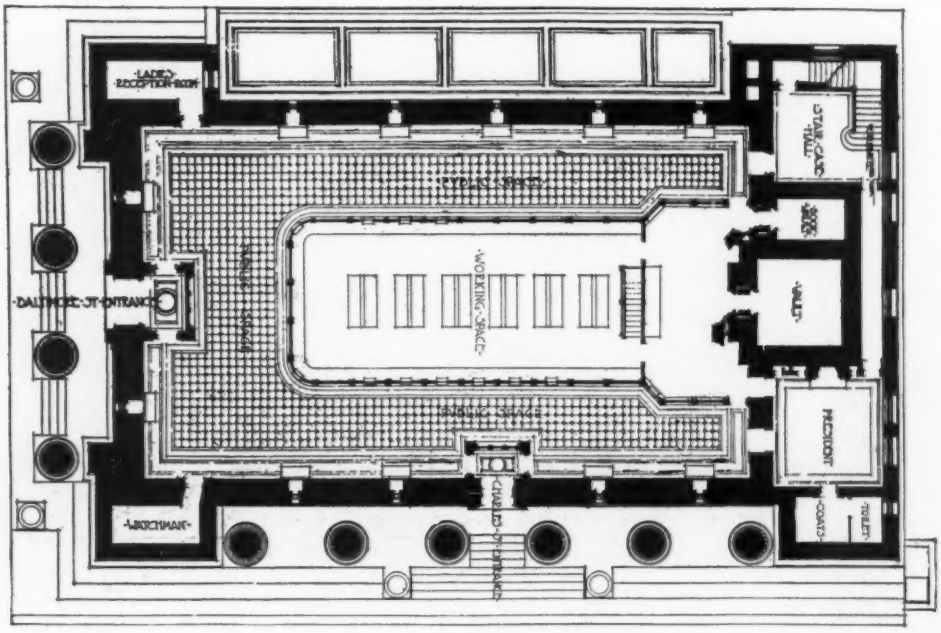
Baltimore, Md.

METROPOLITAN SAVINGS BANK.

Parker, Thomas & Rice, Architects.



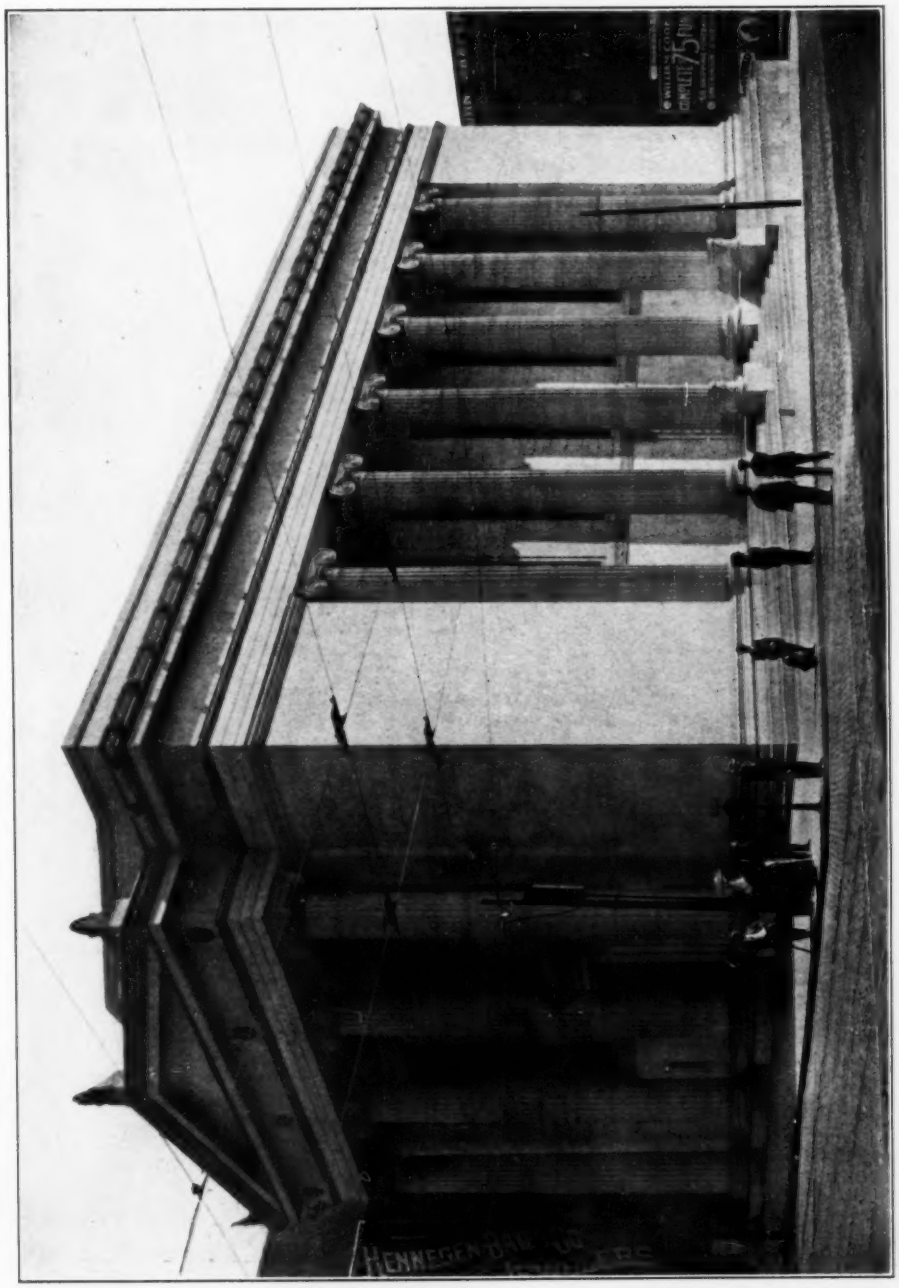
The Banking Room.



Plan.

SAVINGS BANK OF BALTIMORE.

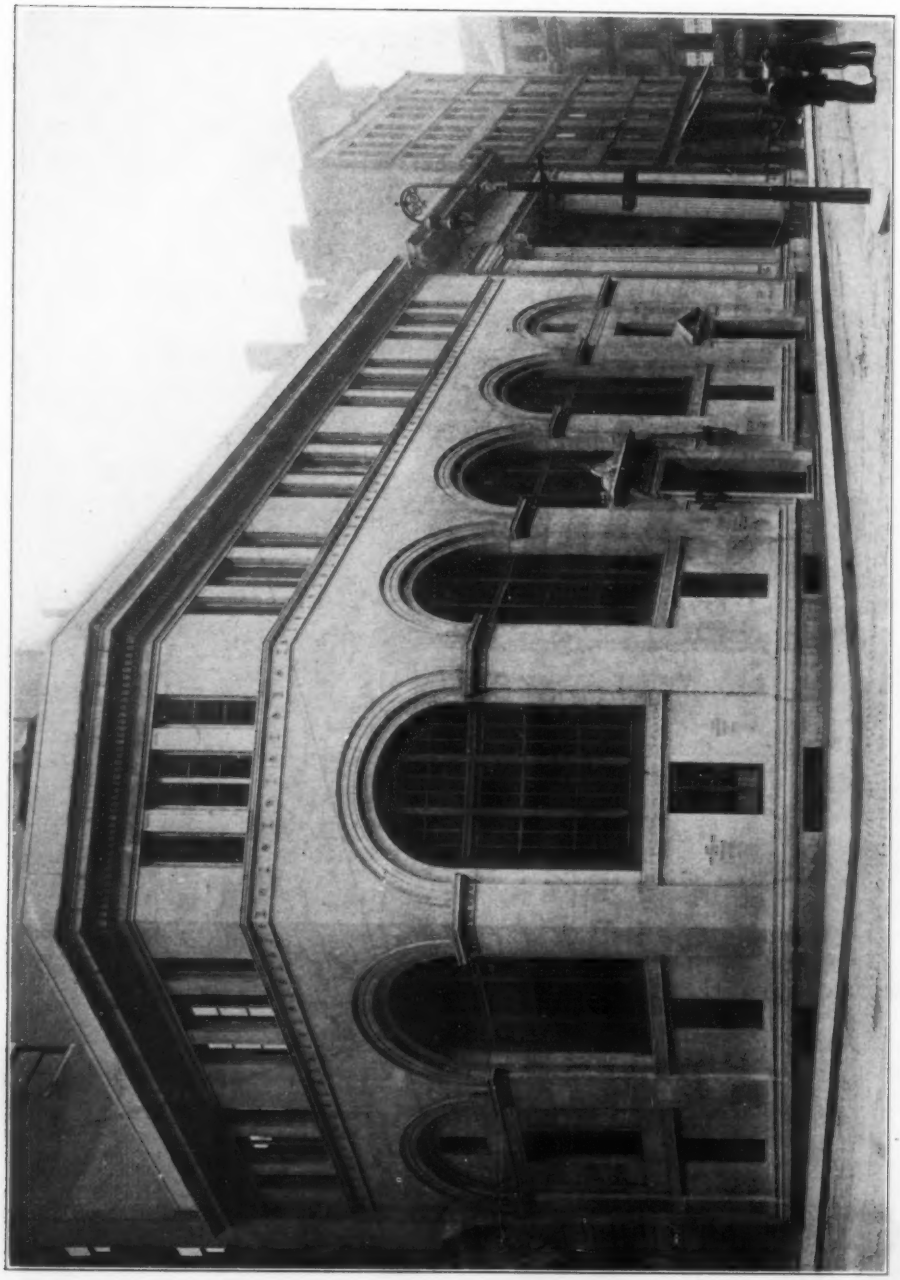
Baltimore, Md. Parker, Thomas & Rice, Architects.



SAVINGS BANK OF BALTIMORE.

Parker, Thomas & Rice, Architects.

Baltimore, Md.



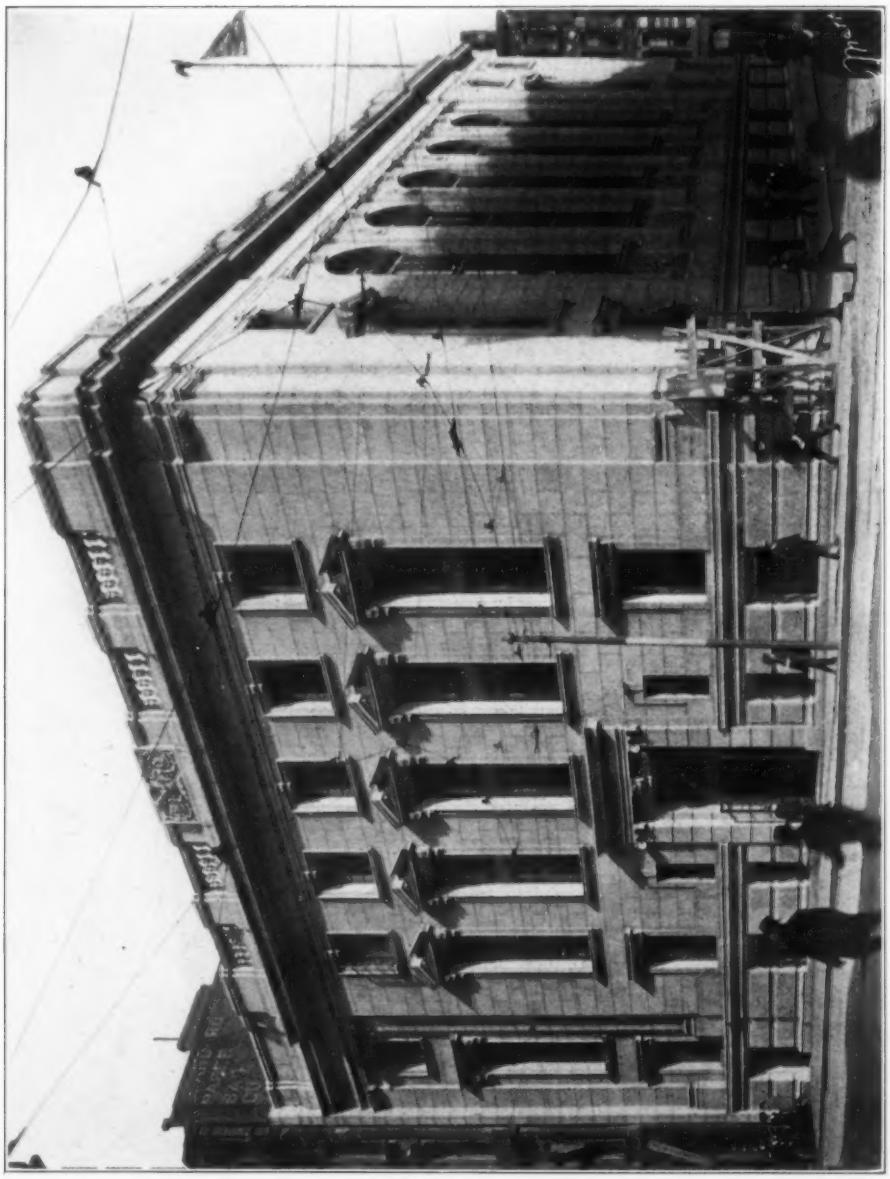
NEW ENGLAND TRUST COMPANY. McKim, Mead & White, Architects.

Boston, Mass.

THE BANKING ROOM OF THE NEW ENGLAND TRUST COMPANY.

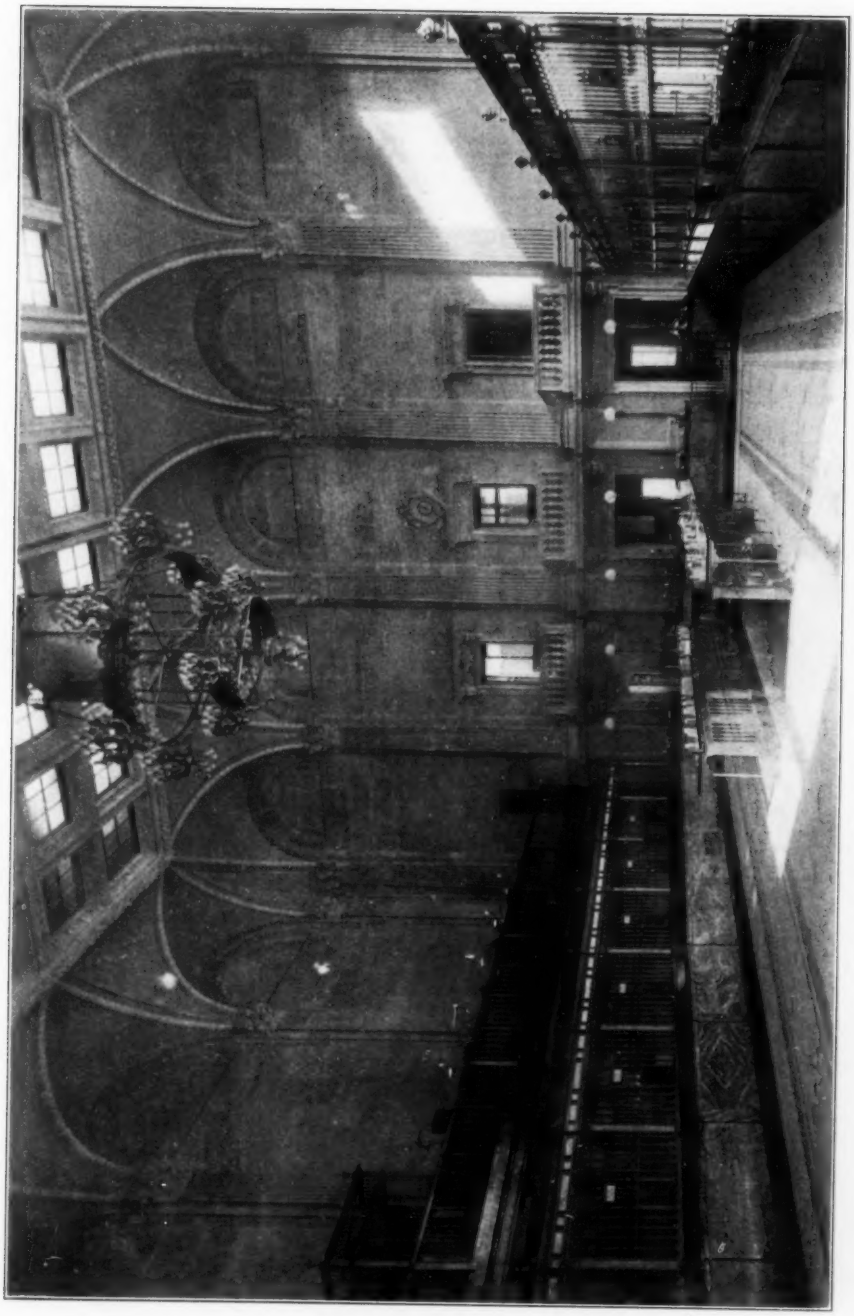
Boston, Mass.

McKim, Mead & White, Architects.



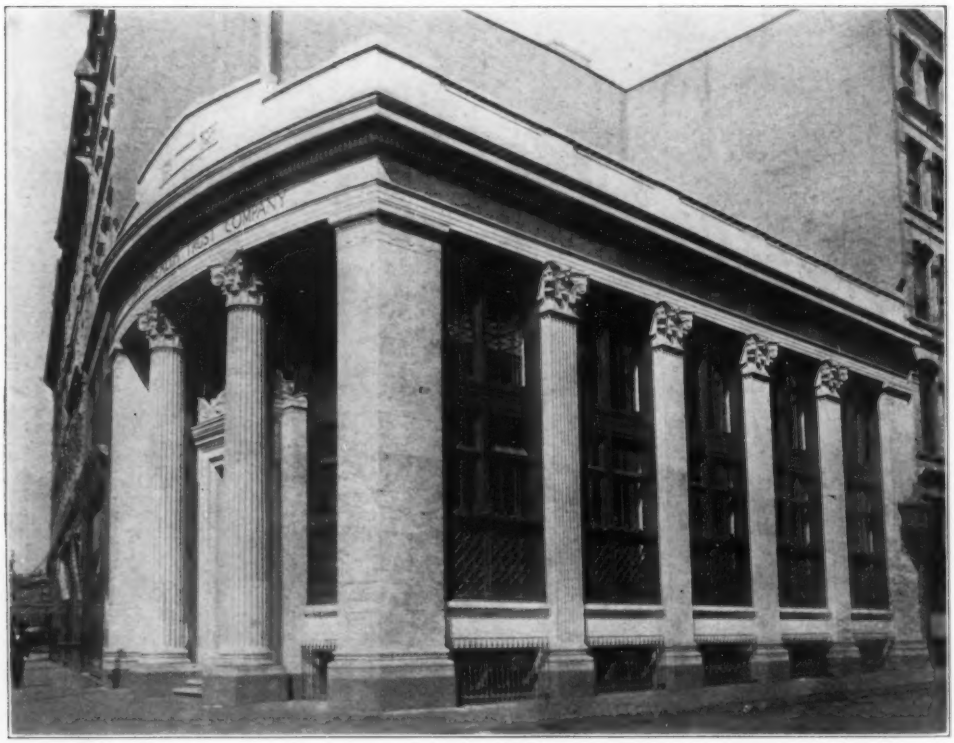
FIRST NATIONAL BANK. Sturgis & Barton, Architects.

Boston, Mass.

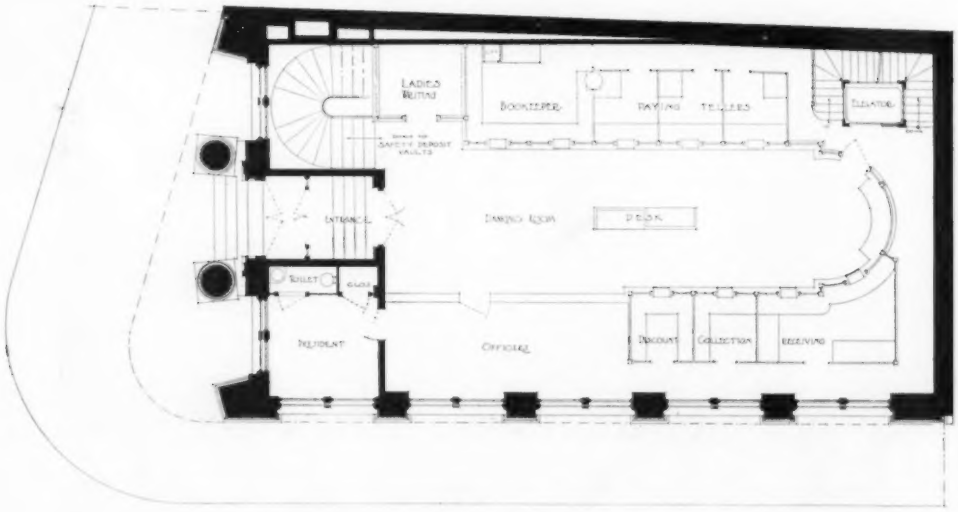


THE BANKING ROOM OF THE FIRST NATIONAL BANK. Sturgis & Barton, Architects.

Boston, Mass.



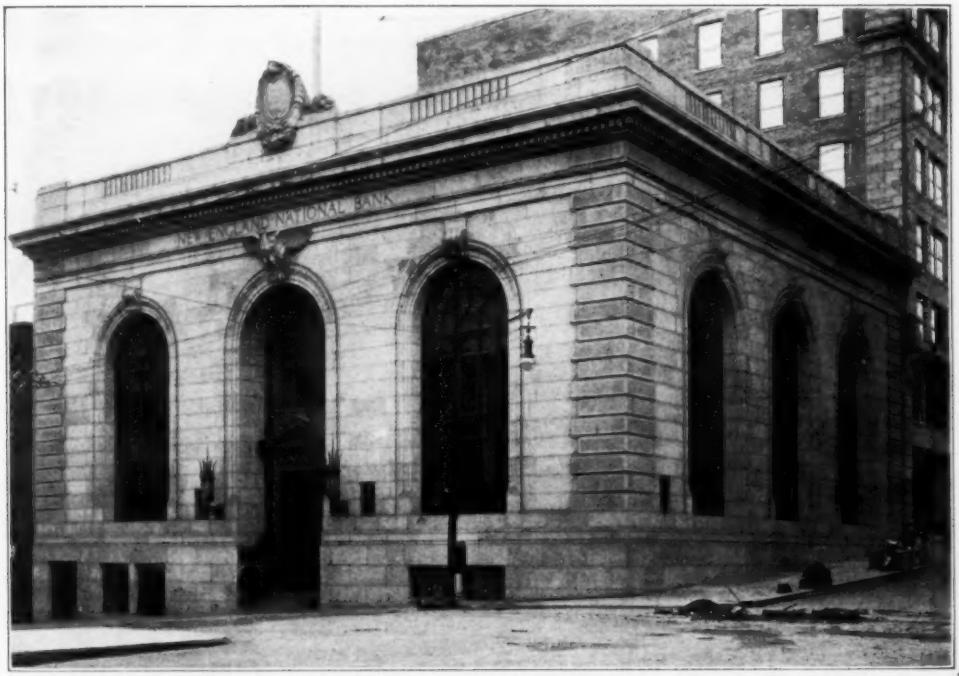
View from the corner.

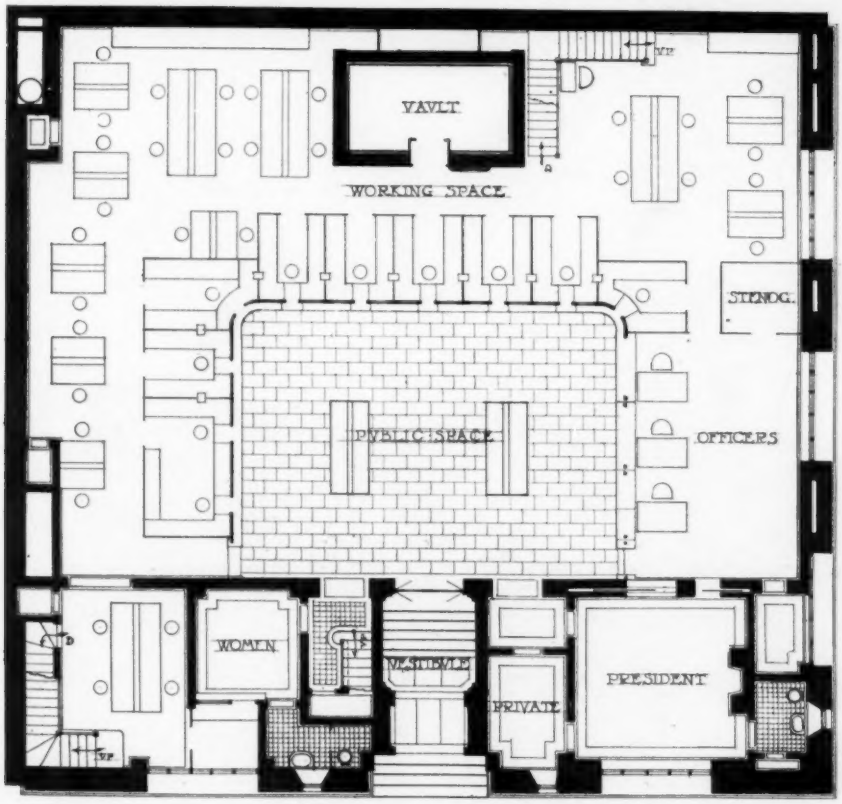


BANK FLOOR PLAN

COMMONWEALTH TRUST COMPANY.

Boston, Mass. Parker, Thomas & Rice, Architects.

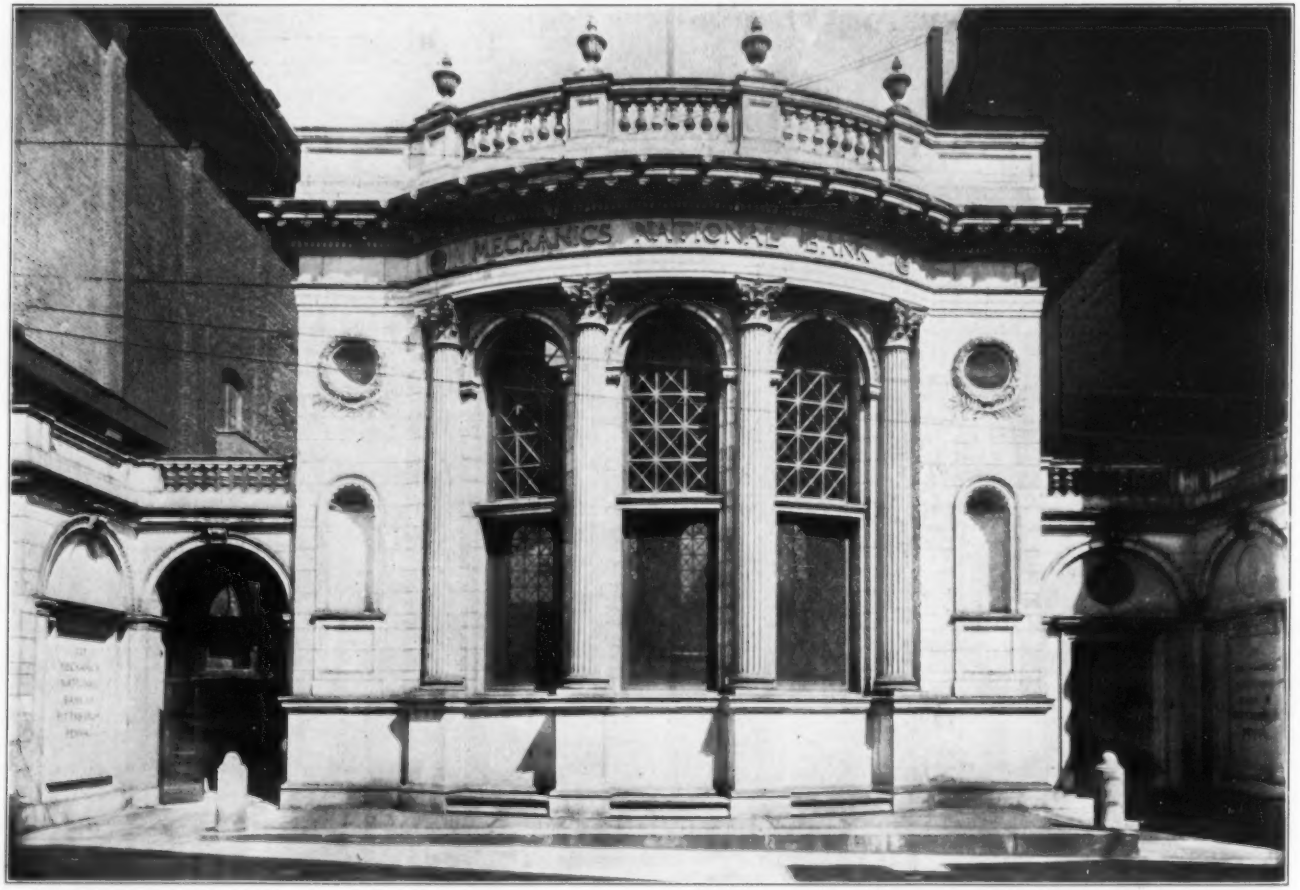




Plan.

NEW ENGLAND NATIONAL BANK.

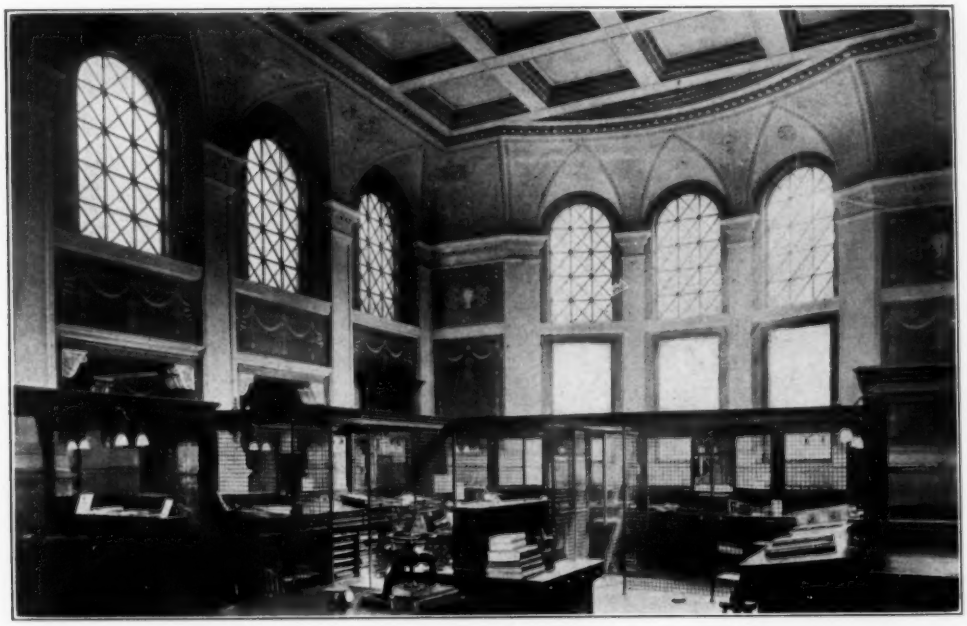
Kansas City, Mo. Wilder & Wight, Architects.



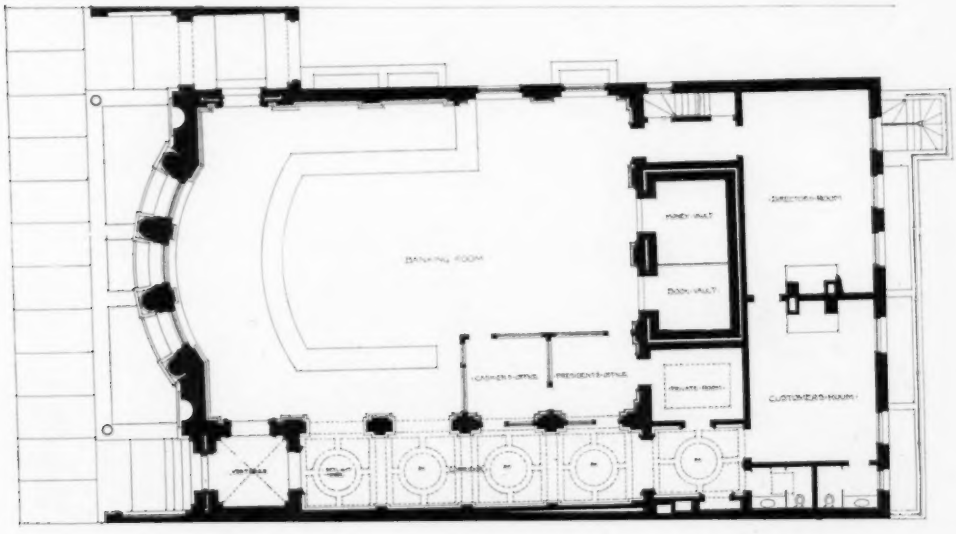
This building offers the novel case of an isolated bank on an inside plot.

Pittsburgh, Pa. MECHANICS' NATIONAL BANK. Alden & Harlow, Architects.

Kansas City, Mo. NEW ENGLAND NATIONAL BANK. Wilder & Wight, Architects.



View in Banking Room.

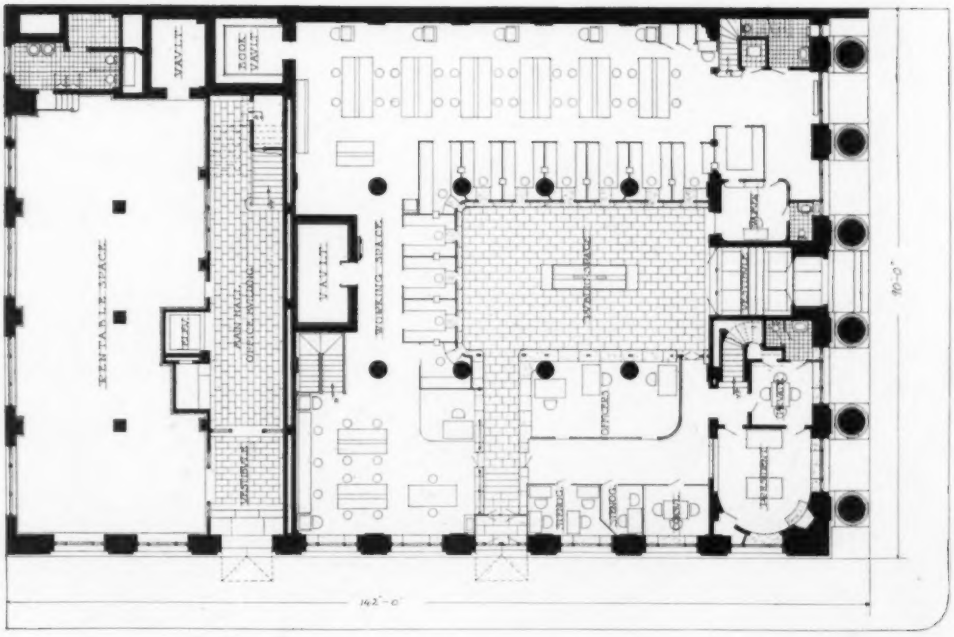


Plan.

MECHANICS' NATIONAL BANK.
(Now the Pittsburgh Stock Exchange.)

Pittsburgh, Pa. Alden & Harlow, Architects

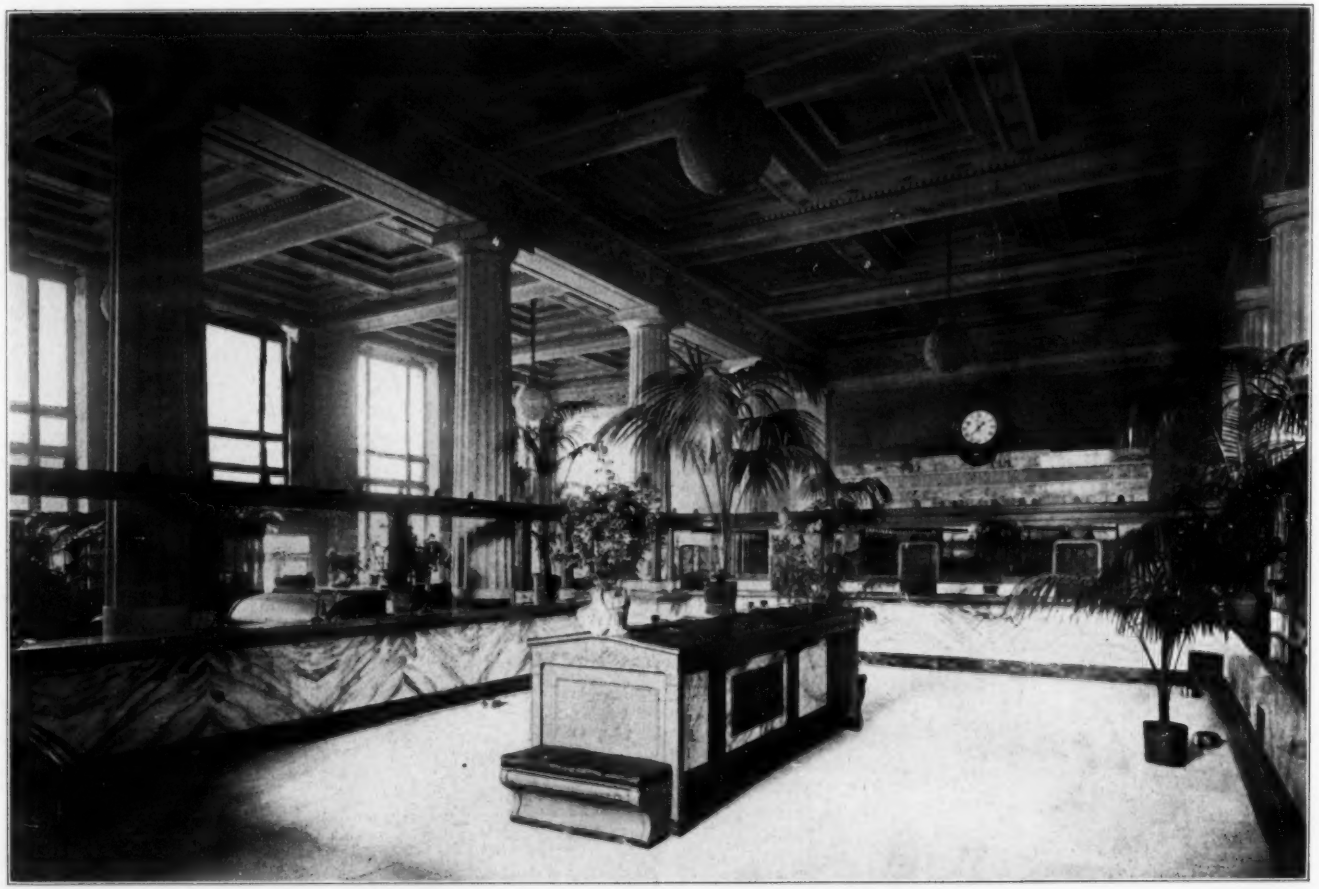
View of exterior.



Plan.

FIRST NATIONAL BANK.

Kansas City, Mo. Wilder & Wight, Architects.



THE BANKING ROOM OF THE FIRST NATIONAL BANK.

Kansas City, Mo.

Wilder & Wight, Architects.

View of exterior.

Plan of main floor.

AMERICAN NATIONAL BANK.

Indianapolis, Ind.

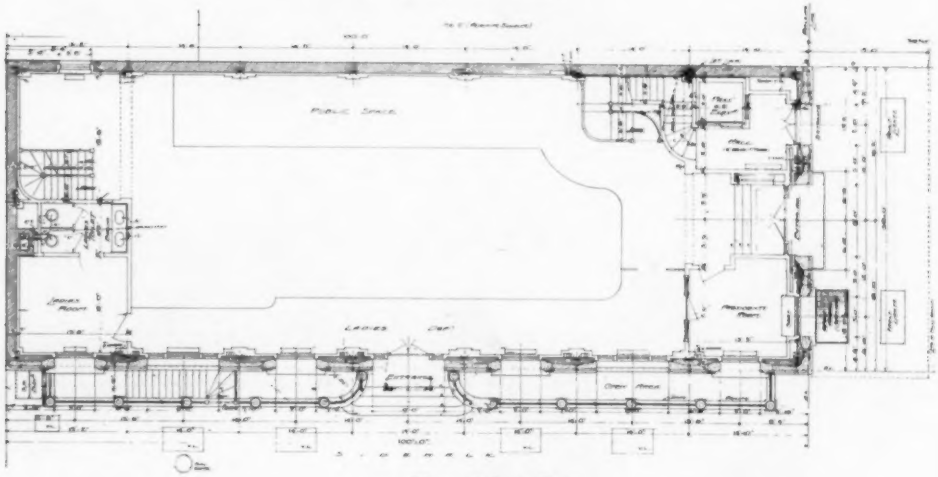
Holabird & Roche, Architects.
Weary & Alford Co., Designers of Interior.

SAVINGS BANK BUILDING.

Cambridge, Mass.

C. H. Blackall, Architect.

View of exterior.
(Photo by A. Patzig.)



Plan of first floor.

SECOND NATIONAL BANK.

5th Avenue and 28th Street, New York. McKim, Mead & White, Architects.

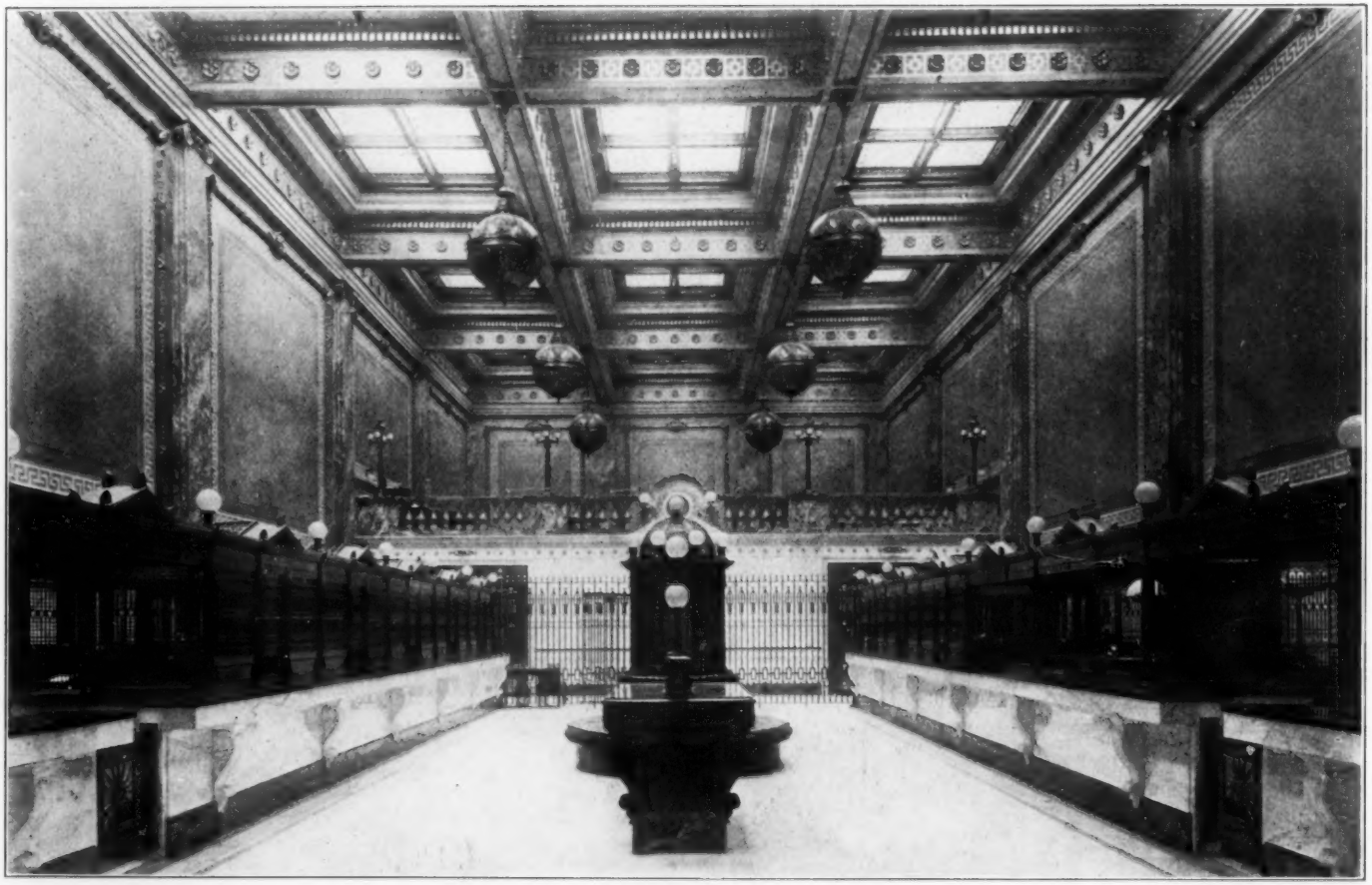
Views in banking room towards and from the 5th Avenue entrance.

5th Avenue and 28th Street, New York. SECOND NATIONAL BANK. McKim, Mead & White, Architects.

(Photos by A. Patzig.)

FIRST NATIONAL BANK.

Englewood, Ill. Julian Barnes, Architect.



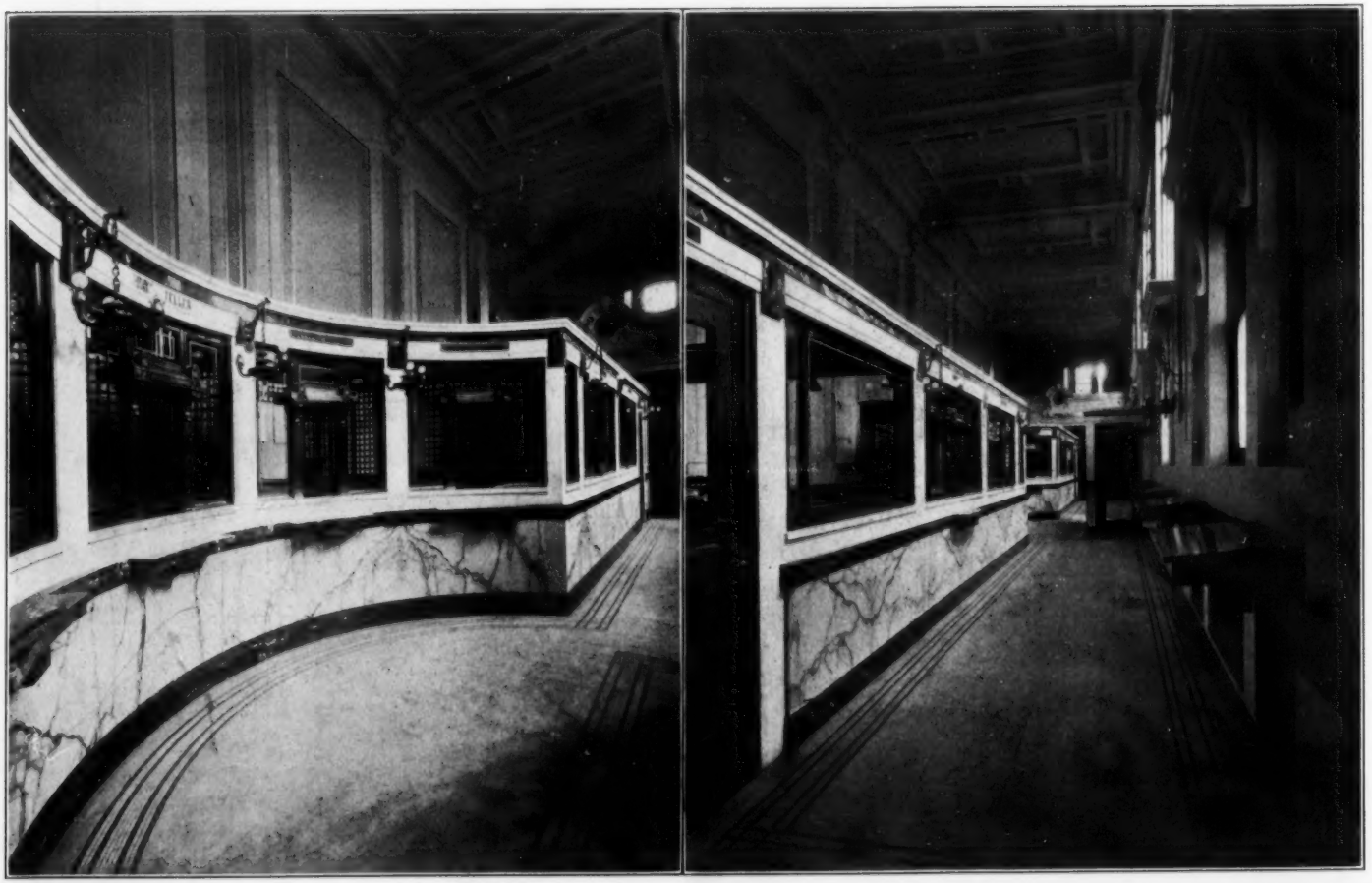
THE BANKING ROOM—FIRST NATIONAL BANK.

Englewood, Ill. Julian Barnes, Architect.

UNION NATIONAL BANK.

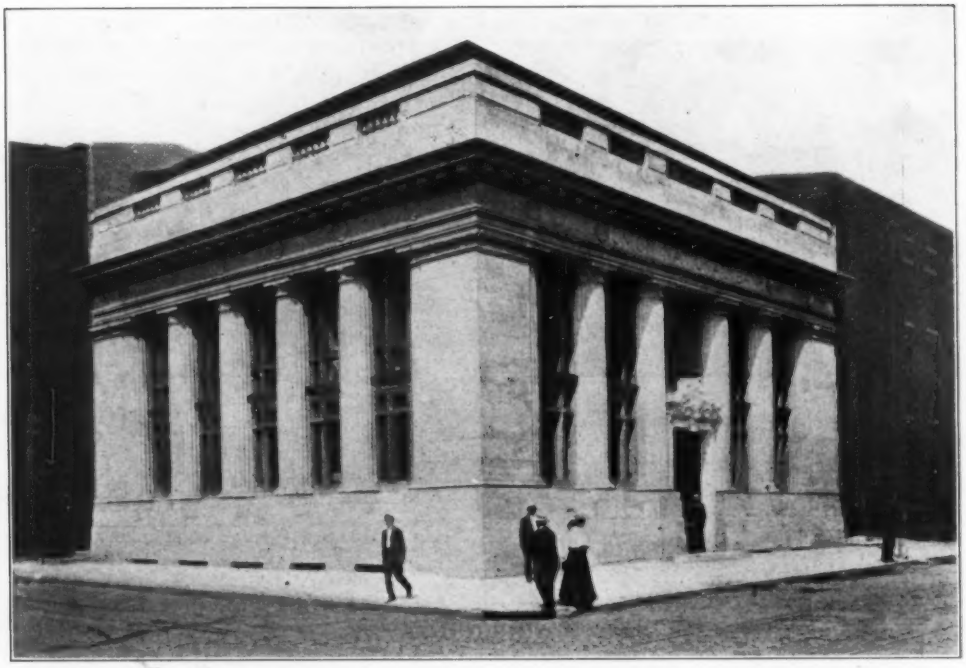
Wilmington, Del.

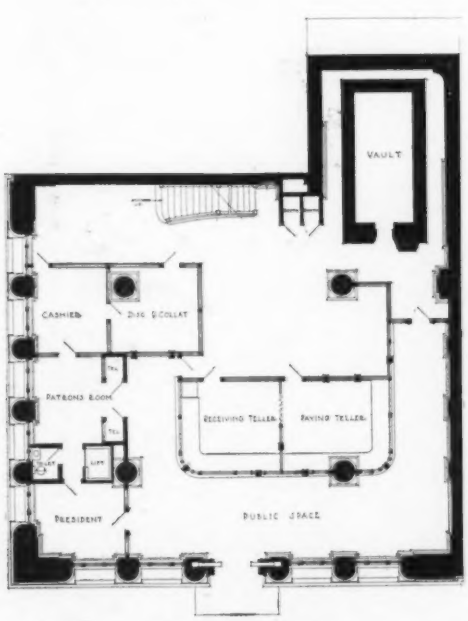
John D. Thompson, Jr., Architect.



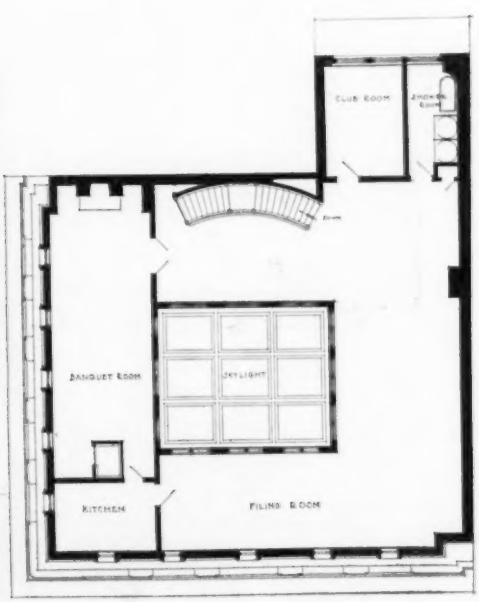
Views in the banking room.

Wilmington, Del. UNION NATIONAL BANK. John D. Thompson, Jr., Architect.





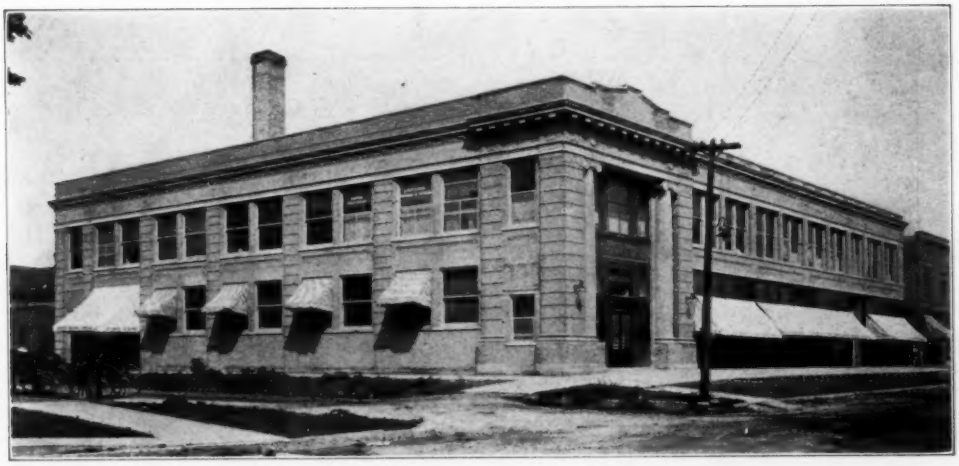
Plan of first floor.

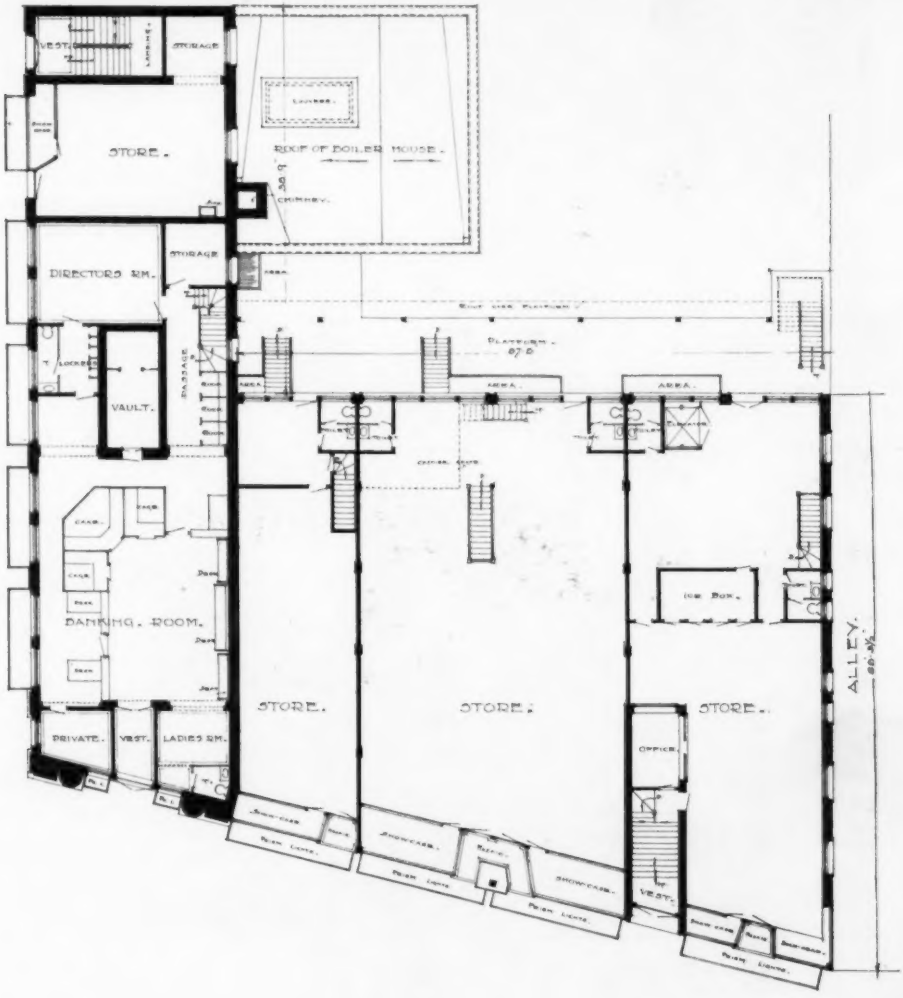


Plan of second floor.

UNION NATIONAL BANK.

Philadelphia, Pa. Newman & Harris, Architects.





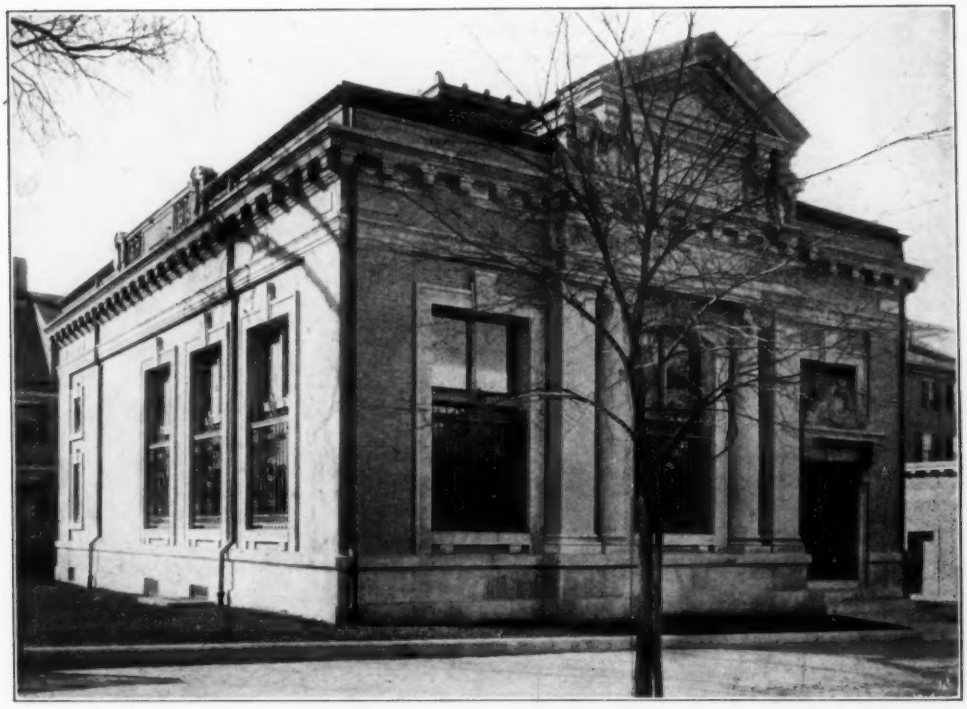
Plan.

LA GRANGE TRUST & SAVINGS BANK.

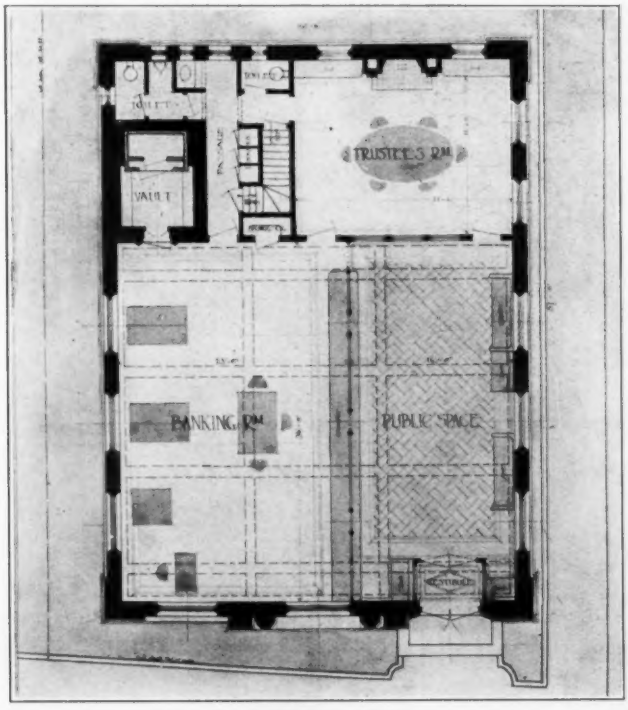
La Grange, Ill. Jos. C. Llewellyn, Architect.

FIRST NATIONAL BANK.
Charlotte, Mich.

MERCHANTS' SAVINGS BANK.
Battle Creek, Mich. Jos. C. Llewellyn, Architect.



View of exterior.

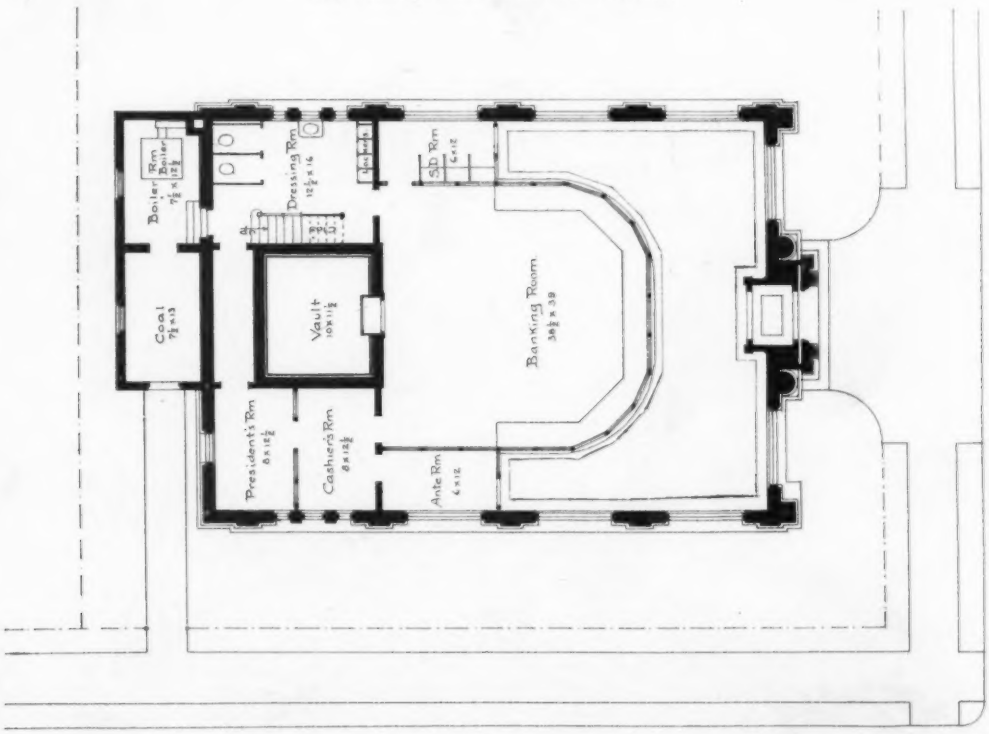


Plan.

NORTH CAMBRIDGE SAVINGS BANK.

Cambridge, Mass. Gay & Proctor, Architects.

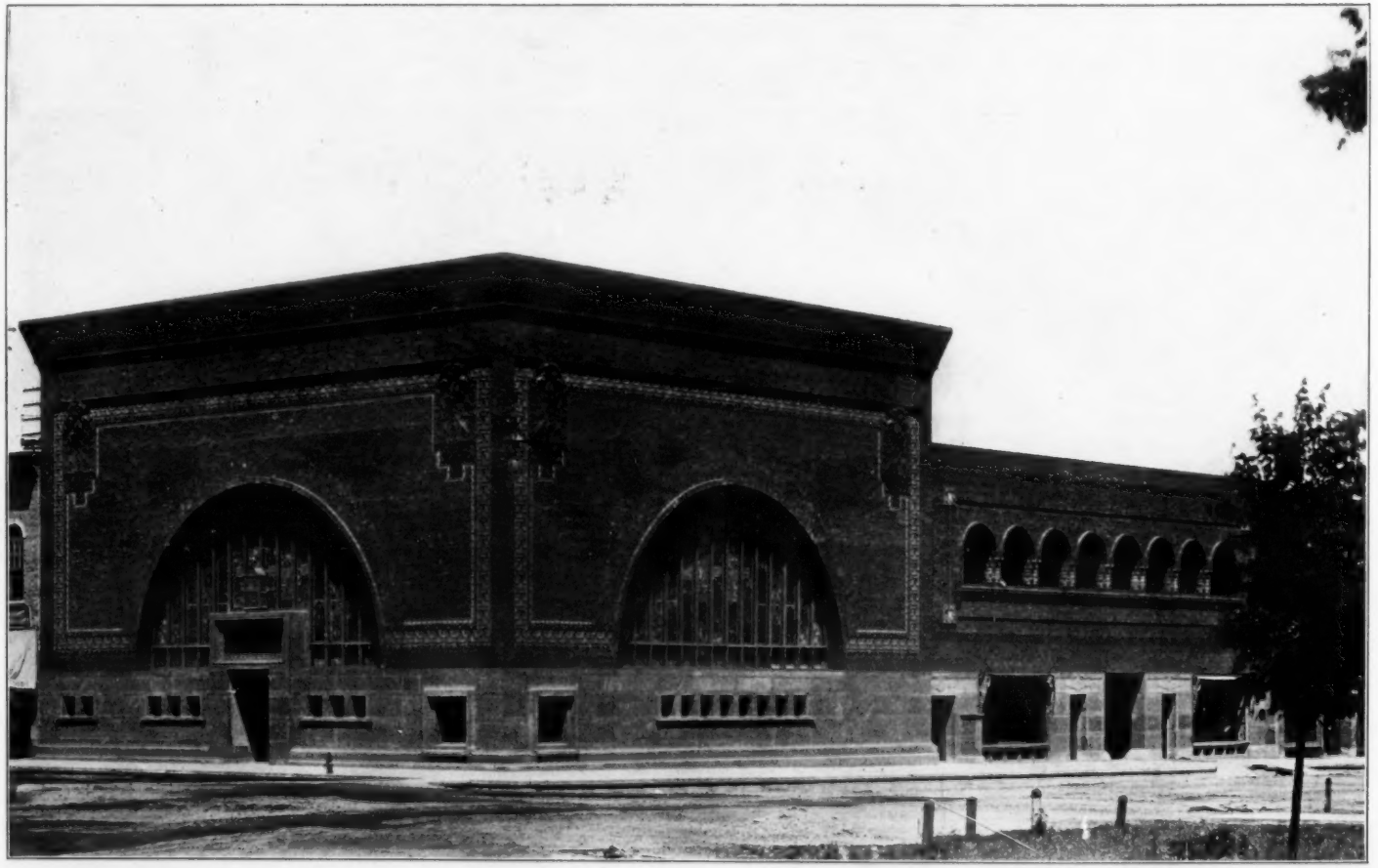
The country bank on an isolated site.



Plan.

MARINE NATIONAL BANK.

Wildwood, N. J. Henry A. Macomb, Architect.



Owatonna, Minn. NATIONAL FARMERS' BANK—EXTERIOR. Louis H. Sullivan, Architect.

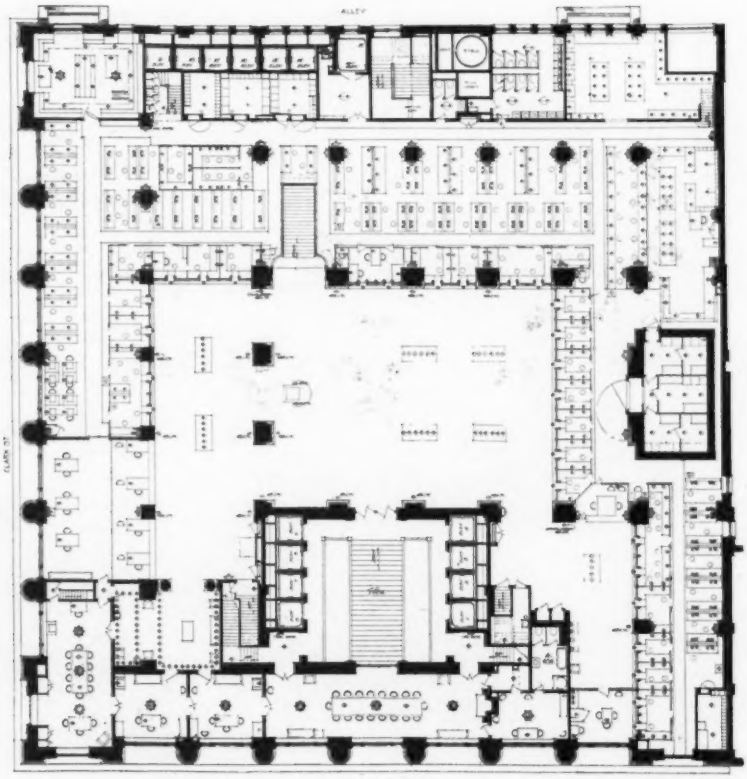
CORN EXCHANGE NATIONAL BANK.
Chicago, Ill. Shepley, Rutan & Coolidge, Architects.

View in banking room.
CORN EXCHANGE NATIONAL BANK.

Chicago, Ill.

Shepley, Rutan & Coolidge, Architects.

View in banking room.



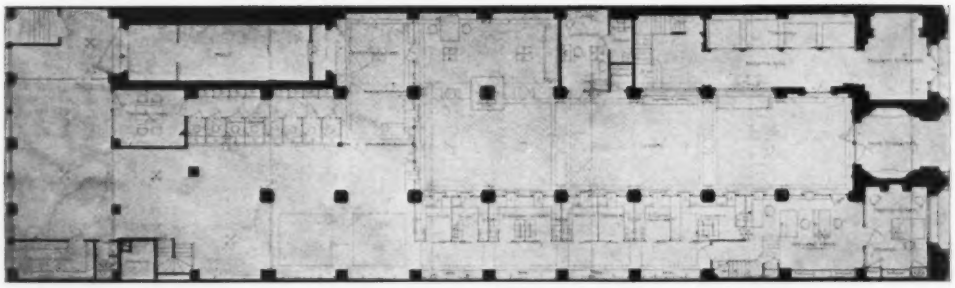
Plan of banking floor.

COMMERCIAL NATIONAL BANK.

Chicago, Ill. D. H. Burnham & Co., Architects.

COMMERCIAL NATIONAL BANK.

Chicago, Ill. D. H. Burnham & Co., Architects.



Plan of banking floor.

HUMBOLDT SAVINGS BANK.

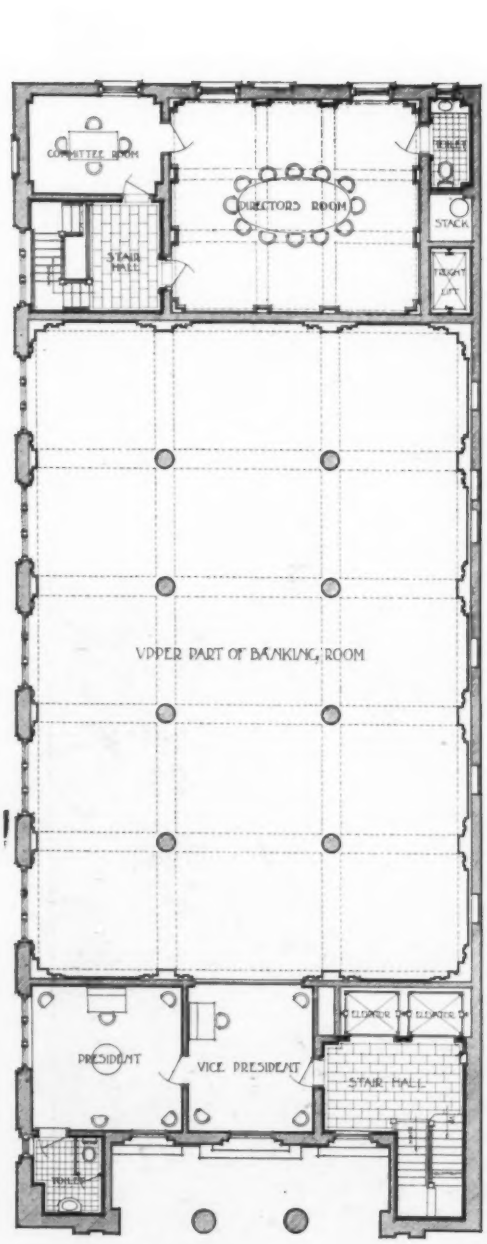
San Francisco, Cal.

Fred. H. Meyer, Smith O'Brien, } Architects.

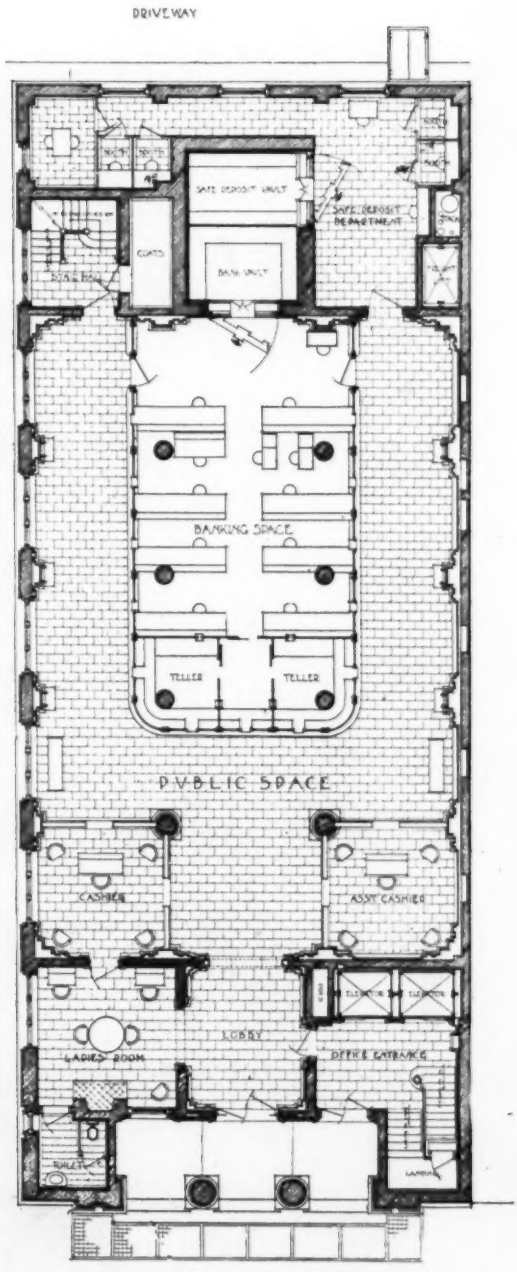
VIEW IN THE BANKING ROOM—HUMBOLDT SAVINGS BANK.

San Francisco, Cal.

Fred. H. Meyer, Smith O'Brien } Architects.
Weary & Alford Co., Designers of Interior.



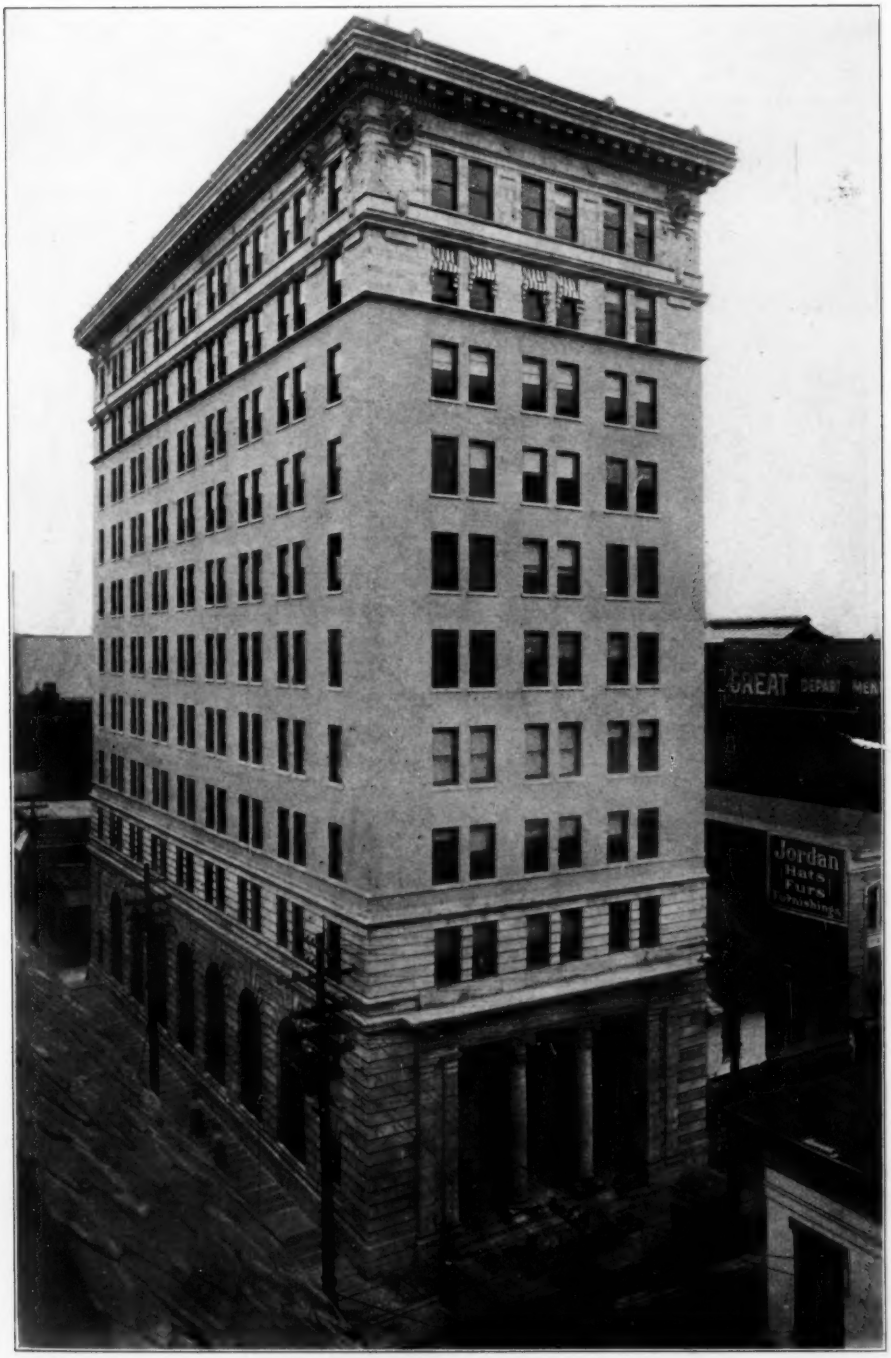
Plan of second floor.



Plan of first floor.

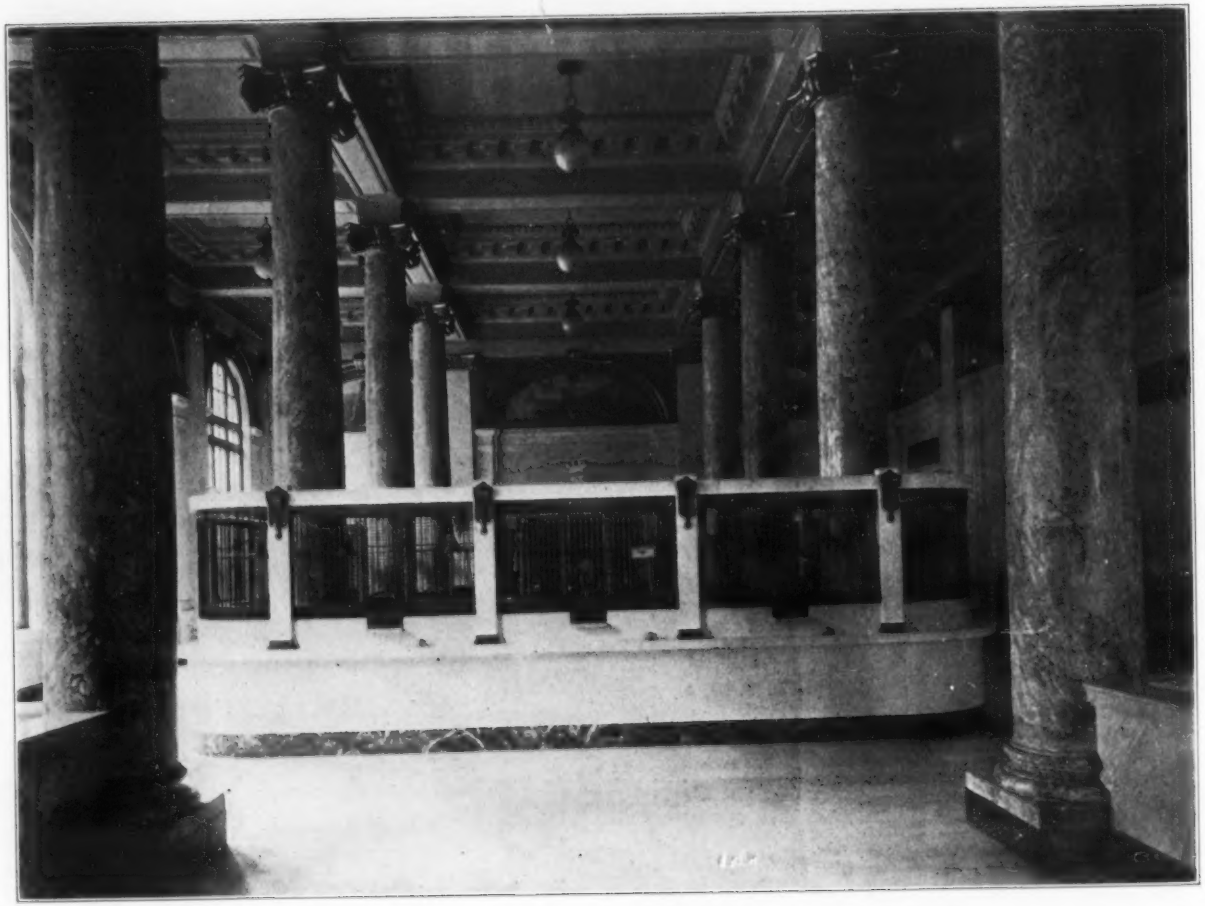
SECOND NATIONAL BANK.

Wilkesbarre, Pa. McCormick & French, Architects.



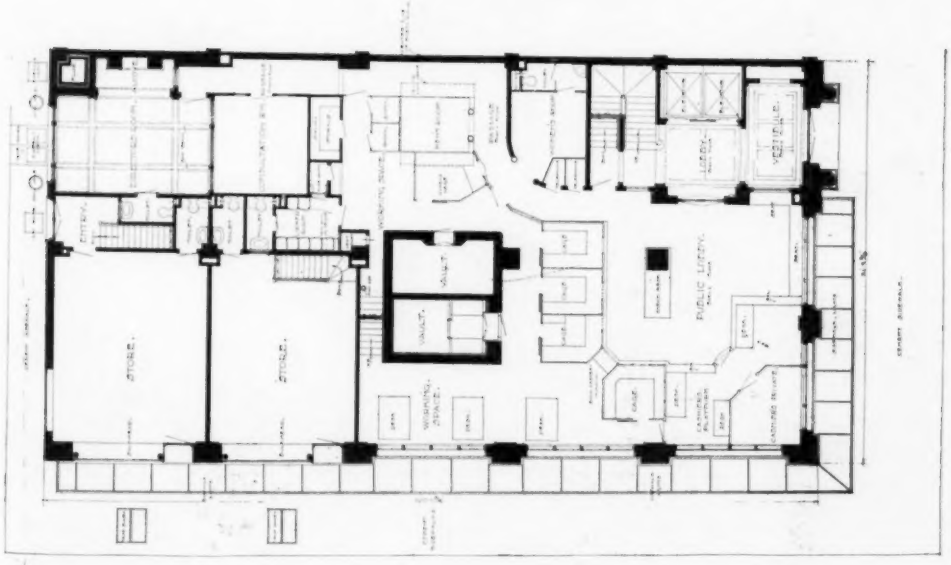
SECOND NATIONAL BANK BUILDING.

Wilkesbarre, Pa. McCormick & French, Architects.



THE BANKING ROOM OF THE SECOND NATIONAL BANK BUILDING.
Wilkesbarre, Pa. McCormick & French, Architects.

View from corner.



Plan.

KALAMAZOO NATIONAL BANK BUILDING.

Kalamazoo, Mich. **Jos. C. Llewellyn, Architect.**

THE NEW BUILDING OF THE KNICKERBOCKER TRUST COMPANY.
Exchange Place and Broadway, New York. McKim, Mead & White, Architects.

NOTES & COMMENTS

THE MADISON SQUARE GARDEN IN NEW YORK

Attention has frequently been directed in these columns to the ephemeral nature of American buildings and especially to the saying of the late William Renwick, to the effect that if a New York structure endured for a full generation, it served its term of usefulness, all things considered. The truth of this remark has been borne down upon us with increasing force as we have seen buildings disappear from our midst, particularly in New York, where demolitions and new erections follow each other in such rapid succession that we hardly have time to miss our old friends before their successors loom up in unexpected forms and colors. In many cases the buildings displaced were so much more worthy of being seen than those that have succeeded that it might be put down as one of the reasons for the lack of comity in our architecture, that conditions of building and affairs are so constituted as to impair the good influence that might result from the good things in our buildings were they permitted to stand long enough to make such influence operative.

The placing up at auction of the Madison Square Garden in New York seriously threatens to be a case where the beneficial influence of one of our best endeavors in public architecture is to come to an untimely end, having endured less than twenty years. It is strongly to be hoped that some new and more remunerative purpose could be found which the building could be made to serve without material harm to its general constitution. But such a consummation would amount, no doubt, to hoping against hope, in a time of such eager real estate development and especially in New York, the very center of such speculative ventures. One cannot help deploring the fact that a more appropriate site was not selected for a structure so important both in the life of New York as a city and as one of its chief points of interest for the traveler who is wont to remember the city chiefly by the impressions which its important buildings have left with him. If for, instance, the Madison Square Garden had been placed on one of the blocks bordering on Madison Square, how imposing and appropriate it would have been as a structure and how much more effective would have been its graceful tower, than "the highest in the world" now thrust upon that public square which deserved a better fate. At any rate, given the Madison Square Garden situated as suggested, the question of its failure as a paying enterprise would, perhaps, never have arisen and there would be now no occasion for regret at its loss, which at this writing seems likely.

The loss to New York of the Madison Square Garden would indeed be a severe one. In these times when superficial ostentation clothed in the most untutored architectural language is still popularly considered "architecture," the Garden stands with comparatively few other New York buildings to proclaim to the public that it has need of revising its notions on art. It plainly says that it matters not in what tongue an artist chooses to express himself, so long as he is an artist and therefore has some definite message to convey. How many hundreds of buildings could one note in a morning's promenade, either through one of our residential, or, for that matter, one of our business districts, that have the appearance, to our average observant New Yorker, of being architecture of a high order! Every time he beholds such a building he remarks: "Splendid building, elaborate architectural work," and with that comment the subject passes out of his observant mind without his being attracted by anything to make him think. Such an individual could not pass the Madison Square Garden and some other New York buildings with the thoughtless remark above alluded to. He becomes conscious of the fact that he is standing in the presence of a large idea expressed, it is true, in terms which are strange to him, but which arouse his curiosity and in so doing compel him to use his thinking powers. Here begins his education in matters of art, and if we possessed more buildings of this "think-compelling" kind, our popular idea of architecture would be by that much the gainer. This is another reason why we have expressed a hope that the Garden will longer remain with us to exercise its desirable influence.

TO THE PROFESSION

To the architects and others, for their liberal co-operation and their more than usually active interest in the bank issue of the Architectural Record, the editors desire to express their appreciation, especially for their aid in supplying plans of their designs. A common complaint made by members of the profession is the lack of attention which architectural magazines pay to plans of buildings. The criticism is just, beyond a doubt, but surely the remedy lies with the architects themselves more than with the publishers. It is the difficulty which editors experience in obtaining plans suitable for the purposes of reproduction that causes the omissions complained of. The making of such suitable plans is often difficult in the short time allowed, but if their purpose be kept clearly in mind the element of time will seem relatively unimportant as the amount and character of the drafting generally necessary to explain the particular planning is reduced to the bare elements of the structure, piers, openings, partitions, enclosures and the like. Rendered drawings in monotone or several colors are unnecessary and, at best, do not serve the purpose as effectively as simple black ink tracings showing only what a diagram need contain. The better understanding which has recently come about between architect and publisher in the matter of drawings for reproduction cannot fail to have an enlightening influence on the reader, who is, in many cases, the architect's prospective client. Herein lies an opportunity for the architectural journal to bring about a complete understanding between owner and architect to their mutual advantage, a work in which it is our desire to participate to the utmost.

ARCHITECT AND CLIENT

In the November "Craftsman" Mr. Carl K. Bennett, Vice-President of the National Farmers Bank of Owotonna, Minnesota, contributes an illuminating article upon how that bank managed to get so good a building. The building itself, fully illustrated in the October number of the Architectural Record, has been acclaimed as a striking success by all sensitive persons who have seen it in the fact or in the photographs. In some respects, comparatively humble and comparatively inexpensive as it is, it seems to be the highwater mark of Mr. Sullivan's architectural achievement. The masses in his work are always effective and well placed, at one end of the scale, the decoration at the other more inventive and more exquisite than any other living architect can show. But between these comes the functional modeling of parts. It is here that Mr. Sullivan has heretofore betrayed a comparative weakness. But one who studies this expressive and beautiful design can here in this respect "note no deficience." There is an assured ease of mastery about the whole and all its parts that marks it as its author's masterpiece. And the effect, the careful inspector cannot fail to note, comes from a faithful and sensitive following out of the actual conditions of the problem and from nothing else. Not a sign anywhere of the architect's desire to lug in a favorite but irrelevant motive. When the Dry Dock Savings Bank in the Bowery in New York was completed, a generation ago, the architect of it remarked: "I think it is a success. It is a bank with a dwelling house on top of it. Nothing else can be made of it, and it will cost more to take it down than it has cost to put it up." Mr. Sullivan can say the same thing about his village bank, as to its specific expressiveness. The chief interest of Mr. Bennett's article is its showing how this admirable result has been brought about, and in thus indicating the responsibility of the client for his architecture. "Because," says Mr. Bennett, "architects who were consulted preferred to follow precedent or to take their inspiration from 'the books,' it was determined to make a search for an architect who would not only take into consideration the practical needs of the business, but who would heed the desire of the bank officers for adequate expression in the form of the building of the use to which it would be put." It is an excellent way. This was not only to be a bank but a village bank, and not only a village bank but a farmers' bank, comprehending a "farmers' exchange" or club furnishing such social facilities on week days as the church steps or the church "horse shed" supplied to the old-fashioned farmer on Sundays. All these requirements have not only been complied with, but have been made the basis of the design. The result is interesting and beautiful and individual because it is so exactly expressive. And it could not have been reached if the client had not made search for the right architect beforehand, and had not loyally supported and co-operated with him after he was engaged. The architect in such a case must divide his laurels with his client.

INTERURBAN BOULEVARDS

The reference last month in these pages to some big plans for interurban boulevards has brought a rejoinder that the projects of that sort are not all on the two ocean fronts. More than a year ago there was serious talk, we are informed, of a scheme for connecting Ann Arbor and Ypsilanti, Mich., by "a double boulevard" twenty miles long, that should not only join the cities but make a connecting link between their considerable park systems. There has been a good deal of talk, too of a boulevard between Buffalo and Niagara Falls, a distance of something over twenty miles; plans have been made for a nineteen mile boulevard between Aiken and North Augusta, S. C.; and no doubt there are many such projects. There is every reason to believe, indeed, that the next few years will see a number of such schemes transformed into realities, and that the country home on the interurban boulevard is the coming opportunity and problem. The "addition" may find rival in the "radial" as a real estate venture.

NEW BRIDGE AT HARTFORD

In the dedication recently of the new bridge across the Connecticut River, at Hartford, there were a good many matters of interest. In the first place, the bridge itself is a notable structure. With its eight granite arches, its length of some twelve hundred feet, and its width of more than eighty feet, it is said to be the largest stone arch bridge in the world. But besides that it is beautiful. Incidentally, it cost $2,000,000. Because it is so big, so costly, and especially because it is beautiful, its dedication was made a great civic occasion, lasting through three days. All the fraternal organizations in and about Hartford took part in the events; the parade of masons was said to be the largest ever held in Connecticut; there was the now inevitable historical pageant, and scores of thousands of visitors came to the city to see the bridge and to have a part in the celebration to dedicate it. There was even a great parade of school children, who had thus impressed upon their minds the worth whileness of doing well what is done for the municipality. If we read of such events in the Renaissance, we would be sighing for the lost hold of civic art on the populace. There is another point not to be overlooked. A long strip of river frontage was bought by the bridge commission, and a large sum has been expended in the construction of a boulevard. This not only connects with the bridge, but it has practically obliterated Hartford's old tenderloin and has transformed an eyesore into a tract of beauty. There has been little heard about that new bridge at Hartford, but it is really a notable thing in municipal development.

A GARDEN CITY INVENTORY

The Garden City Association in England is publishing a small monthly paper. A recent number, containing the reprint of an article in the September issue of "The Millgate Monthly," gives some interesting statistics of the First Garden City. Building was commenced in 1904, and "at the moment of writing," the author says, the following was true: The area of the estate is 3,818 acres. Of this the town site area is 1,318 acres. The number of "houses built and in course of erection" is 1,110, and the population is 6,000. There are 24 factories and workshops built or building, 45 "shops," and 9 public buildings or places of worship. Eight miles of new roads have been made and eleven miles of sewer constructed. There are 17 miles of water mains and twelve miles of gas mains. Included in the town area are 200 acres of parks and open spaces. The lands of the estate cost £151,569, or under £40 per acre. About £100,000 has been spent in development. A recent valuation has appraised the property at £379,500, making an increase of £128,000 in four years. As to the people who live in the city, the article throws this curious side light on their characteristics, putting the words into the mouth of Ebenezer Howard himself, whom the writer is interviewing: "Of course, the new community has its problems. Some have been of a personal character, and may be guessed when I say that here we have a hatless brigade; another contingent that scorns hose and wears sandals; ladies whose loose robes with floral embroidery would do equally well in a Grecian garden as in a Garden City; men who prefer knickerbockers to trousers; sixty vegetarian families, and some people who commenced their career at Letchworth by living in huts and wooden shades." It were a pity to add a comment.

A PROGRAM FOR PHILADELPHIA

The report of the City Parks Association of Philadelphia (the twentieth annual) is as usual a synopsis of hopes and dreams of city beauty for Philadelphia, offering a stimulating program of endeavor. The report urges with especial emphasis the proposed creation of an art center around the art gallery which is to be erected on the site of the Fairmount Park reservoir, where the new parkway from the city hall enters Fairmount Park. Says the report: "The presence of the river," at one side of the proposed group, "is the one thing that was needed to make the opportunity unsurpassed. . . . The money, it will readily be seen, can easily be made available through the generosity of Mr. Widener, and through the fact that the Academy of Fine Arts and School of Industrial Art own buildings on Broad street, which, if sold, would fully meet the cost of the erection of classic buildings in the position indicated by the Fairmount Park Art Association's commission." The report urges that four acres of Stenton Park be at once acquired; it recommends that boulevards be built along the banks of the Schuykill and Delaware rivers; it expresses dissatisfaction with the present methods of tree planting in Philadelphia. "In the city," it says, 'it does not do to dig a hole and stick a tree in it. Proper precautions will result in the tree living and growing." It urges that League Island Park, for the improvement of which a half million dollars will soon be available, be made a great water playground. The preparation of a city plan is again advocated. "The plan cannot be prepared in a day or a month. It will take time, it will take thought and it will take money. Ten, fifteen or twenty-five thousand dollars will not do it. Fifty thousand at least will be required if the experience of other cities is any criterion." The demand for this is noted as a summing up of the whole report. All the hopes and dreams of community aesthetics and development resolve themselves, it is stated, into the necessity "that the best that is practicable shall be accomplished." It is well said: "That the legislautre has drawn an imaginary line in the middle of a creek or at a certain angle with the equator, as a political division, or that the federal government has designated a certain line in the middle of a river as a boundary, does not in any way bear upon the question of the development of this community. The community in which we live does not end at the Delaware River on the east nor at Cobbs Creek on the west. . . . It covers all the territory which pulsates with the life of Philadelphia endeavor; and this territory, which is constantly widening with increasing transportation facilities, is the territory covered by the flow of our daily population." The request is for "a commission of recognized experts," to act in connection with the present director of public works and the chief of the bureau of surveys.

FIGURES OF CITIES

The census bureau report on "Statistics (for 1906) of Cities Having a Population of Over 30,000," has just been published. It contains a mass of data both valuable for reference and interesting in itself, and for the comparisons it offers. It well supplements for the country at large the data for Massachusetts cities and towns which was lately published by that State's Bureau of Statistics of Labor and reviewed in this department.

The number of cities included in the report is 158, of which fifteen had over 300,000 inhabitants, twenty-seven between 100,000 and 300,000, forty-eight between 50,000 and 100,000, and sixty-eight under 50,000. For all the sneers at the far flung boundaries of Chicago, it appears not only that the city of greatest land area is New York—with about twice the area of Chicago; but that the second city in area is New Orleans. Chicago is a poor third. In the matter of municipal expenditures, it is interesting to learn that of what are called "corporate payments"—from which are excluded payments for temporary transactions and all payments made by one department, enterprise or fund of the city to another—sixty-seven and six-tenths per cent. are for current expenses of operation and maintenance, while 31.4 per cent. are for improvements of a more or less permanent character—a larger proportion than probably most persons would have guessed. One per cent. goes for the reduction of indebtedness. The corresponding percentages in 1902 were 71.2 for expenses, 27.3 for outlays, and 1.5. for reduction of debt. The relative increase of payments in the five years was, therefore, somewhat greater for permanent improvements than for expenses of operation and maintenance. The total per capita corporate payments for the 158 cities in 1906 were $26.54. The corresponding payments from 1902 to 1905 were $22.48, $24.77, $25.72, and $25.80, respectively. In

four years the costs of municipal government has increased 18 per cent. faster than population. That salaries and wages have more than borne their part in this increase, is shown by the fact that while they were 68.8 per cent. of the general expenses in 1906, they were only 66.4 in 1902. Taking individual cities, the largest per capita corporate payments were made in Boston, New York and Washington—$48.52, $43.39, and $37.84 respectively. Of the total general expenses for all cities, schools take the most —92 per cent. Recreation, including parks, receives only 3.4 per cent. and libraries and museums account for 1.3 per cent. The total per capita debt of the 158 cities was put in 1906 at $75.69. There had been a gradual but steady rise from 1902, when the figure had been $62.04. The total per capital debt less sinking fund assets was $60.54 in 1906, having increased about the same as the gross debt in the four years. It would seem, however, that elaborate city schemes and the luxury of modern city building had not seriously effected urban finances.

A WAVE OF PLAYGROUND PROGRESS

The editors of "Charities," whose testimony on the subject is doubtless the most trustworthy that can be secured, in editorial review of the social advance of the year, call especial attention to the twelve months' progress in the playground movement. In it, indeed, they find "perhaps the best" evidence "that the year has been one of rapid and substantial growth in the spread of preventive measures." The significance of this estimate concerning the relative measure of playground development lies in the breadth of the field which is surveyed by those who make it. It means that whatever else may be overlooked in the social and civic progress of the past year, the playground movement at least must be considered. The secretary of the Playground Association of America in his annual report, submitted at the convention in September, stated that the playground expenditures for the year—a year when neither individuals or municipalities were feeling rich—had probably exceeded a milion dollars a month. He reported that while sixty-six cities were maintaining playgrounds a year ago, the number by September, 1908, had increased to one hundred and eighty-five. Of this number 116 were publicly supported; and in 118 additional cities and towns steps were being taken for the immediate establishment of playgrounds. Various other evidences of the progress of the wave are recorded. A clipping bureau which found eighty-three articles on playgrounds in one month of 1907 furnished 1,566 articles on them in the same length of time eight months later. Two new companies were formed for the manufacture of playground apparatus, and yet of the two old companies the business of one had doubled while the sales of the other had gained 200 per cent. There were no hard times in that line. It was significant, too, that at the convention the emphasis was on more intensive work, not, as in the previous year, on extensive; it was not, that is to say, on gaining new converts to the playground idea—they were coming very fast; but on increasing efficiency of the playground's service. The playgrounds for little children and the athletic and recreative fields for youths and adults may now be said, as the result of the last year's progress, to have been definitely accepted as parts of the well ordered city.

WHY ENGLISH GARDEN CITIES SUCCEED

The contributor of the unsigned "Notes from Europe" that were lately printed in "The American Architect" has some interesting comments to make on the English Garden Cities development and the pending town planning bill, to which reference has been here made so often. He notes reasons that have been, perhaps, too little appreciated for the success of the recent English experiments. "Manufacturers," says he, "are moving out of London. The 'Garden City' idea has taken root and is flourishing, ... and manufacturers are finding that it pays better to operate where daylight is not charged for, where the ceilings of manufacturing rooms may be more than nine feet high without mixing up with local regulations which limit the total height of their buildings, and inflated land values which prohibit horizontal extension. . . . It is interesting to compare the land values, for these show what has brought about the present exodus from London. Land at Letchworth is leased upon ninety-nine years agreement for as little as $75 per acre, annual rental, while for the same area the yearly rental in some manufacturing districts in London runs to as much as $15,000." Then of Mr. Burns's town planning bill he says, after describing its purposes, "It is doubtful whether any bill will or can provide for all that Mr. Burns hopes to ac-

complish. Doubtless he has in mind the creation of Bedford Parks, Hampsteads and Port Sunlights all over the country. . . . But Bedford Park owes its beauty to the fact that all of the houses, the shops, the church, the club and the 'Pub' were designed by two of the best architects England has produced in many years—Messrs. W. Eden Nesfield and R. Norman Shaw. To the latter is due much of the architectural beauty of Hampstead, though many of the new houses are the work of Mr. C. H. B. Quennell. It is the same case in all of the 'Garden Cities,' their beauty is due to the architect who planned them and his co-workers who have designed the individual buildings, for, no matter how carefully a law may be framed to provide for beauty, this will not be the result unless there is the perception and intelligence found to create it. . . . I doubt, for instance, that, except by requiring more land to be given up to each house, Mr. Burns's measure could improve such a scheme as the latest Garden City—the Hampstead Garden suburb planned by Parker and Unwin and E. L. Lutyens, architects. Is it probable that a government official could sugest much to improve such a layout? Could it provide for better plans than some of those by M. H. Baillie Scott or better exteriors than those by Michael Bunney and by E. Guy Dawber?" This is well said, and it needed the saying. The ground plan of a town is very important but it is not all, nor even the most obvious feature in the town's beauty.

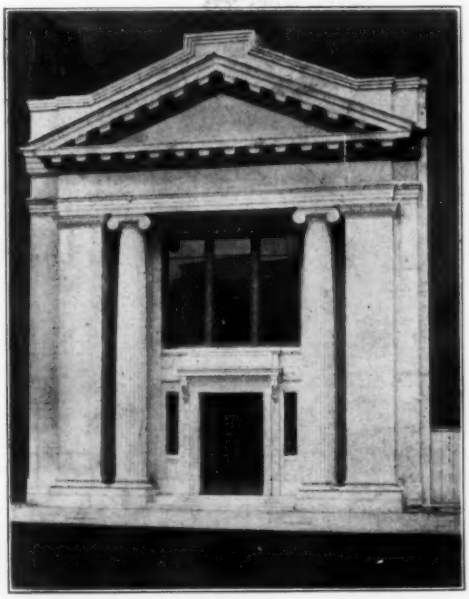
Technical Department

THE ARCHITECT'S PROBLEM

The architect has many things to consider in the choice of an exterior building stone for an edifice, like banks, churches, State buildings and Capitols, and great monuments, in which it is sought to express dignity and beauty combined. Naturally the material must be appropriate for the style of architecture, and it must be free, so far as possible, from the changes wrought by the extremes of cold and heat and the dust which is everywhere in the atmosphere.

Granite, which probably is the material most used in such buildings and memorials, is naturally rough in finish and dark in color. Dust from surrounding streets soon make it look darker than its original tone. The discoloration from rain penetrates so deep below the surface that even the sandblast cannot restore its former colors.

Frost and weather play havoc with marbles and limestones. They quickly discolor and lose their sharp edges.



KALAMAZOO TRUST CO. BANK
Kalamazoo, Mich.

SOLDIERS' AND SAILORS' MONUMENT
Vicksburg, Miss.

Terra Cotta, while cheap and quite a good resistant to fire, lacks entirely the dignity and character of white granite and marble. Another disadvantage is that the enamel soon "crazes" through the influence of frost.

The problem is to find a material which is,

First, absolutely non-absorbent and, therefore, non-staining and unaffected by frost;

Second, is beautiful in tone and character;

Third, which possesses a great crushing strength;

Fourth, which has maximum heat resistance;

Fifth, which lends itself readily to carving and molding;

Sixth, which can be obtained in sufficient quantities;

Seventh, which is moderate in cost.

More and more architects are finding all these qualities in a Southern product—Georgia Marble. Building reports show that increasing numbers of ornamental structures are being erected from this material — magnificent buildings, like the Girard Trust and Banking Company building of Philadelphia, and the Metropolitan Bank of Washington, D. C., of which photographs are shown on pages 16 and 22. Their lasting beauty is constantly gaining new converts for this splendid marble.

GIRARD TRUST COMPANY
Philadelphia

As an example of its wonderful non-absorbent qualities, the writer saw a cube of Georgia marble drilled to be used for an inkstand. After such use covering months, this material had absorbed no more color than if it had been of glass. It is a well known fact that ordinary marble would have absorbed the ink within a few hours.

As to its strength—ordinary building stone, according to a report made from the Ordnance Department of the United States Army, at Watertown, Mass., will crumble under a pressure from 3,000 to 8,000 pounds per square inch. Very few of the very best granites will withstand the enormous pressure that Georgia marble will resist without even cracking—as high as 12,000 pounds per square inch.

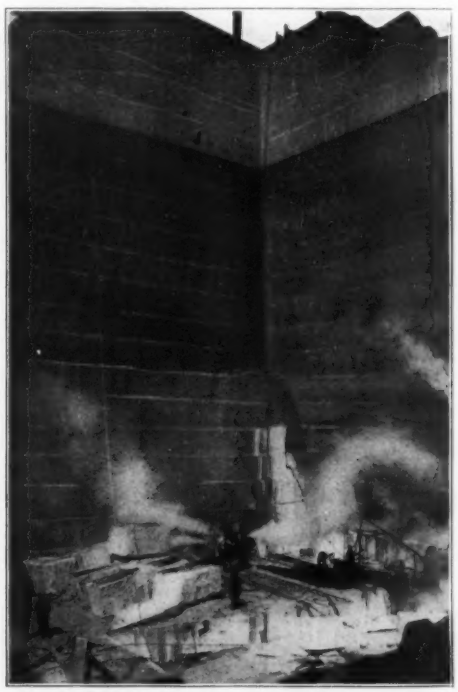
Georgia marble, like other marbles, has very high heat-resisting quality. It is a fact that Georgia marble buildings came through the Baltimore fire with less need of repair than those of any other material. Some of them were put into use as soon as they became sufficiently cool.

Dr. Hiram Cutting, Ph.D., who conducted a series of tests for the WEEKLY UNDERWRITER, disclosed the startling fact that the damage by fire to a granite building is about equal to that suffered by a structure of wood, under similar conditions. In the matter of heat resistance Dr. Cutting ranks building materials in the following order:

1. Marbles.
2. Limestones.
3. Sandstones and freestones.
4. Granite.
5. Slate.
6. Conglomerates.

Nature seems to have favored the Georgia quarry as well. It is recognized by geologists as the most wonderful marble deposit in the world, for it is a mammoth, continuous block in which no break has ever been discovered. The winters of Georgia's climate are mild and are free from the interruptions by ice, which put a stop to outdoor quarry work in the North. Thus, the output of the Georgia deposits is limited only by the demand.

The marble for the Girard Trust and Banking Company's building in Philadelphia, the Metropolitan Bank of Washington, D. C., and the Soldiers' and Sailors' Monument in Vicksburg, Miss., was quarried by the Georgia Marble Company at Tate, Ga., and was finished by the Blue Ridge Marble Company of Nelson, in the same State. Both these companies are represented in the Northwest and Canada by the L. H. Dapprich Co., Chicago. This company will furnish further information about this remarkable and ideal building marble on application.



ONE SOLID BLOCK OF MARBLE
Georgia Marble Co. Tate, Ga

"SWEET'S"

FOR

1909

For over four months three large presses have been grinding out the sheets for the third annual edition of "SWEET'S"—the one covering the building season of 1909. For a good part of the four months the presses have run sixteen hours a day, and for the past six weeks three shifts of men have kept these monsters at their task from one week's end to the next without interruption. And the run is now finished.

The edition, 10,200 copies this time, is now being distributed to the purchasing power of America, so far as building construction and equipment is concerned. Architects, builders, engineers, purchasing agents of railroads and industrial plants, city, state and government officials, have found the former editions of "SWEET'S" of great value in their work of specification and purchase, and have sent in their applications for the new "SWEET'S" in a manner which is both flattering and embarrassing to the publishers. We are glad that our plan has proven such a great success, that a method has been found for successfully classifying, indexing and preserving the vast mass of catalogue matter pertaining to our great building business, thus enabling the busy architect to find what he wants quickly and surely, and at the same time affording to the manufacturer a more sure and economical means of selling his goods than was afforded by the old promiscuous catalogue system.

The thing which we did not fully appreciate, but which is forced to our attention every day is the great and diversified *demand* for information about building materials. Within the past week we have had urgent appeals for copies of "SWEET'S" from architects, builders, State Board of Control, prison warden, purchasing agents of railroad systems, purchasing agents of large industrial plants, engineers, real estate development companies, and dealers in building materials and supplies. We have also during the same period had inquiries from Japan, Mexico, Argentine and Panama.

In addition to having the best list of manufacturers yet represented in "SWEET'S," we have added this year a new and, we believe, very valuable feature. We refer to the Checking List. This is a most careful compilation of the many elements of a building operation, and is intended to serve as a reminder to all who have anything to do with specifications. It is so arranged that each step can be checked up, and at the end one can be absolutely sure that nothing has been forgotten. It is a reminder, and is also full of suggestion for the wide-awake man who is looking for the best and most up-to-date methods and materials. We shall welcome any criticism of this Checking List, as it is our intention to improve it and continue its publication in each new edition of "SWEET'S."

Every architect who has not already done so is invited to send to us his present address, so that we may place a copy of "SWEET'S" in his office.

We hope that all who come in contact with this 1909 "SWEET'S" will find it as good as we think it is, and will help us to accomplish our next task—to make the 1910 edition better in every way.

"SWEET'S"

FOR

1910

While "SWEET'S" for 1909 is good —by far the best yet—we have every reason to feel that the fourth edition now preparing will see probably the greatest advance we have made in any year since the beginning of our enterprise. The last edition was compiled during a period of great business depression, amounting in many sections to absolute prostration, so far as building was concerned. Many firms were financially unable to incur even the slightest expense, and others maintained, wrongly, we believe, that it was useless to send a catalogue to an architect when he had no work in his office. Now, however, conditions have changed, manufacturers are increasing their sales forces, and many firms which had never been customers of ours have already reserved space for their catalogues in the next issue of "SWEET'S." A majority of our present clients, too, have, in the course of correspondence with us concerning our future plans, given the heartiest indorsement of our system, and have signified their intention of remaining with us and of making "SWEET'S" a prominent and permanent part of their system of sales promotion. This correspondence was brought about as a result of our policy of submitting to those most interested all vital questions in connection with the publication of "SWEET'S"; we refer to the architects who use "SWEET'S" and the manufacturers whose catalogues are represented and whose agents we are.

About a month ago a firm whose opinion we highly respect, wrote us, urging that in future we adopt a loose-leaf system for "SWEET'S." Even though we had investigated this matter very carefully before the first edition of "SWEET'S" was brought out, because of the prominence of the firm urging the change, we determined to submit the question to our entire clientèle, which we did.

The results of this inquiry are extraordinary and most surprising, even to us, who felt absolutely sure what the verdict would be. Over ninety-five per cent. of the manufacturers have declared themselves absolutely in favor of the permanent form of binding for "SWEET'S," and entirely opposed to the loose-leaf plan. The reasons given, while varying in form, with remarkable unanimity strike the vital point—that the loose-leaf book suggests and invites changes, and from its very nature is less reliable and permanent than the bound book. It is so easy to mix up the sheets if they be once removed for reference, and so difficult to rearrange them in their proper places. And then, again, the bound volume, with its flexible back, is easily opened and used, while the other form is so heavy, cumbersome and difficult of use. Next month, when we have a little more space at our disposal, we will give a resumé of these opinions regarding the loose-leaf system, and will also include the opinions of the architects on the same subject. The replies to our letter from architects are just beginning to come in, and they, too, show the same trend of opinion. The last one to come in, from a Connecticut architect, reads as follows:

"I am perfectly satisfied with my bound volume of 'SWEET'S.'" And there are several hundred of the same sort.

We personally care very little as to the form "SWEET'S" shall eventually take, but it is gratifying to have our judgment backed up in such an emphatic manner as to the respective merits of the two systems for "SWEET'S" in the present state of its development.